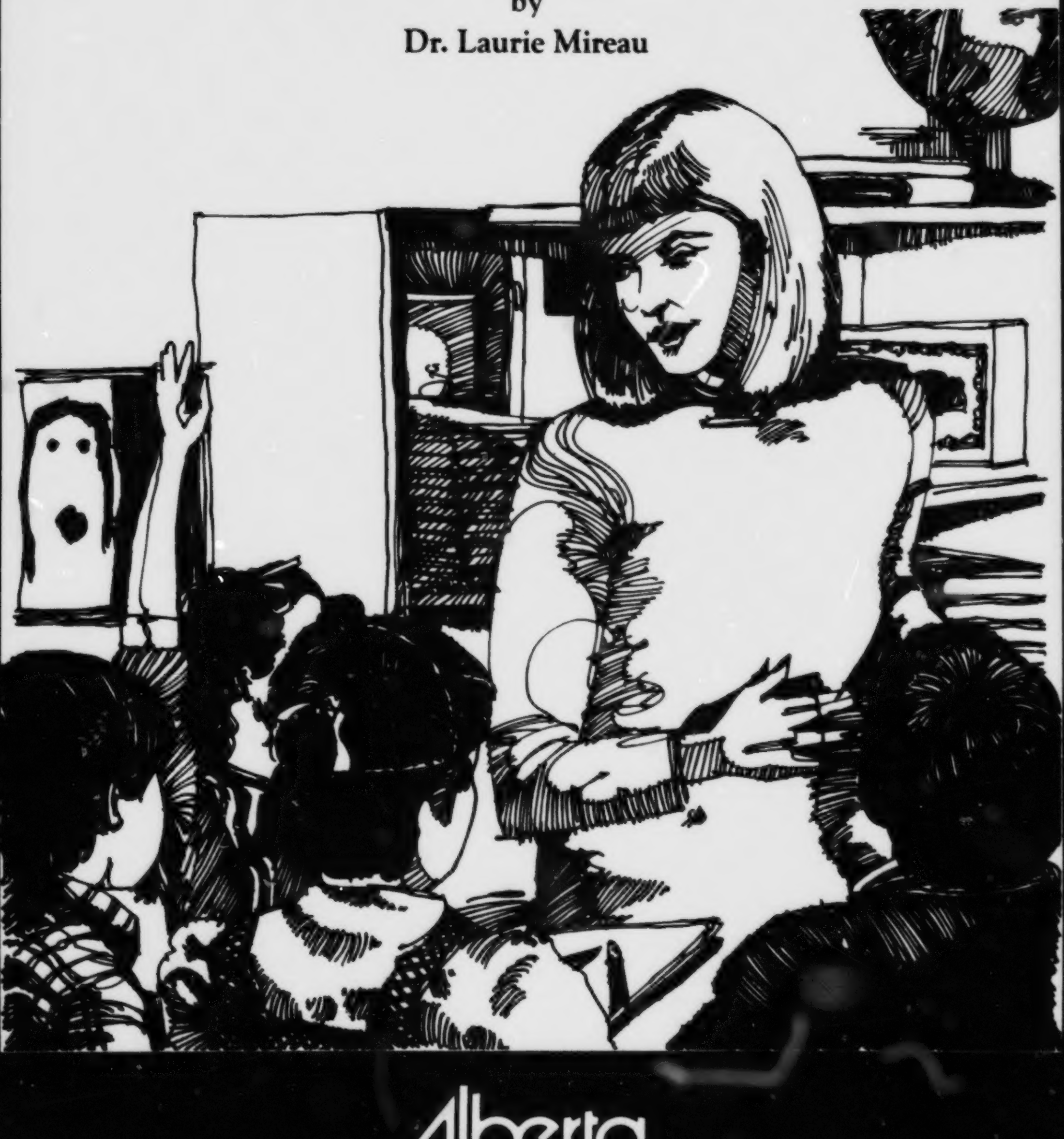
Evaluating and Improving Teaching Performance

by

Dr. Laurie Mireau



Alberta

EVALUATING AND IMPROVING TEACHING PERFORMANCE: INSERVICE KIT

Dr. Laurie Mireau

Planning Services Branch
Alberta Education

October, 1985

The contents of this Inservice Kit are not intended to explicate or imply Alberta Education's policy regarding the evaluation of teaching performance.

An integral part of the Kit is a set of 30 videotapes (14 training tapes and 16 demonstration tapes) which must be used in conjunction with the appropriate modules in the text. Sets of videotapes may be purchased from the School Book Branch, Alberta Education, 10410 - 121 Street, Edmonton, Alberta T5N 1L2 (Phone 403/427-2767). Purchase orders should specify the following: number of sets, title (Evaluating and Improving Teaching Performance: Inservice Kit), format (either ½ inch VHS or Beta) and directed to the attention of Mr. Ralph Goddard. The price of $400.00 per set includes provision of containers and shipping.

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Foreword to the Reader

On behalf of Alberta Education, the Planning Services Branch is pleased to provide educators and administrators with "Evaluating and Improving Teaching Performance: Inservice Kit." The Kit, comprised of a manual and thirty videotapes, is designed to assist teachers, supervisors, and evaluators in maintaining and enhancing the quality of teaching in the province.

The Inservice Kit emphasizes a collegial approach to the continued professional development of teachers. It focusses on a set of teaching behaviors and skills which research shows to be associated with effective teaching and with enhanced learning outcomes for students. The Kit provides suggestions and procedures for identifying, observing, recording, and evaluating selected teaching practices and for using the information gathered from classroom observation as a basis for conferences, reports, and jointly developed follow-up plans.

The manual has been organized into modules with a loose-leaf format. This facilitates not only the selection of particular topics and the easy copying of materials for study and inservice purposes, but also the insertion, deletion, and modification of materials. One or more of the videotapes must be used with each module. Information on how to obtain the videotapes will be provided as soon as possible.

Please note that in using this Kit, educators and administrators should feel free to select, adapt, or reject the ideas presented according to their particular needs. Also, they should be aware that the criteria in this Kit are not all - inclusive. According to research, they represent "our best bet to date."

Alberta Education welcomes this opportunity to work with all educational stakeholders in enhancing opportunities for the professional development of school administrators and teachers. To this effect, over the next year, Department staff will be collecting your responses and suggestions for modifications to the Kit. Surveys and meetings are possible vehicles through which your input may be gathered.

For those engaged in planning, implementing, and reviewing their policies, guidelines, and procedures for teacher evaluation, a companion document: Planning for an Evaluation of Teaching Performance Volumes I-IV is also available through the Planning Services Branch.

Sincerely,

H. I. Hastings

Irving Hastings
Director
Planning Services

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Chapter One

Introduction to "Evaluating and Improving Teaching Performance: Inservice Kit"

Evaluating and Improving Teacher Performance
Alberta

"EVALUATING AND IMPROVING TEACHING PERFORMANCE: INSERVICE KIT"

INTRODUCTION

The evaluation of teaching is a complex activity fraught with emotional and political overtones, but it holds the potential for the challenge and growth of supervisors and teachers involved in the process.

Evaluation need not be seen as something to be tolerated, but under certain circumstances it may not be very useful and may only occur in response to external pressure to get in there and file a report, in which case "tolerated" is perhaps an appropriate description.

Teachers have had justifiable reasons for feeling anxious about being evaluated because purposes and procedures have not always been made clear and their chance for input has often been non-existent. Frequently the evaluation concentrated on what was wrong instead of describing "what is" and supporting the teacher in continued efforts to do the best possible job. The most workable teaching evaluation plans involve a mutual negotiation of what will be evaluated and how this will be accomplished. Supervisors who involve teachers in goal setting at the beginning of each year and who assist teachers in reaching these job targets can attest to the success of the venture.

Districts intent on developing an acceptable teacher evaluation program must first define what effective teaching is. What behaviors will be included in a list of desirable teaching behaviors? These criteria should be based on findings from research on teaching (our best bet to date) and on the values and beliefs of stakeholders in the district.

Historically, in Alberta, most evaluations of teaching have been conducted for the express purpose of completing a report so the teacher can be granted permanent certification. Once that hurdle has been cleared, many teachers are never evaluated again. More and more districts are instituting evaluation programs and are realizing the true potential for professional growth and support for all participants.

Evaluation may be conducted for management or development purposes and it is these two different functions (which follow the classroom visit) that clearly distinguish the two processes. Through concentration on evaluation for development (teacher growth and improvement) attention becomes focused on the primary reason for evaluation: the improvement of the quality of instruction.

Manatt and Sweeney claim that quality in teaching is our greatest undeveloped resource in the 1980s. We should aim to improve the teaching skills in our school district. Through the provision of performance feedback, teachers can be shown how to be more effective and to build on their teaching strengths.

Before embarking on a formative evaluation program with a teacher or before writing a required summative report, an initial "reading" of the teacher's performance must be taken. Assuming qualified and knowledgeable personnel are conducting the performance review and the teacher has been appropriately involved in designing the procedures, an initial assessment is made that will indicate whether the teacher's performance is "satisfactory/non-satisfactory" in a summative report or will identify areas in which the teacher and supervisor can work together to improve teaching performance.

Purpose of the Kit

This manual has been assembled to assist supervisors in choosing approaches they may wish to use in making this "initial diagnosis." A variety of empirically - based teaching behaviors which may suit the situation have been presented for consideration and, where possible, methods of collecting data and assessing teacher performance in these particular areas have been included. Thus the emphasis in this manual is on effective teaching, how to recognize the key teaching behaviors, how to record data and analyze it, and how to coach the teacher in the implementation of effective teaching skills. In addition, a major focus of the manual is on continous professional development for teachers and suggestions and procedures are presented throughout. Consideration must always be given to unique situational factors before data collection procedures and instruments are selected for use.

Format of the Kit

The learning kit entitled Evaluating and Improving Teaching Performance comprises six chapters. All six of the chapters are supplemented by videotapes (produced by the writer) that are co-ordinated with the reading material and that will present information and will afford practice in coding teacher behaviors exhibited during classroom instruction. These teacher behaviors are the main foci of the package and are viewed as suitable criteria for the enhancement and evaluation of instructional expertise.

The teaching behaviors included are basically the set of behaviors used for study in Project Quest, a large-scale observational study conducted in sixty Edmonton classrooms by the Centre of Research in Teaching during 1978 - 1979, under the direction of Dr. Al. MacKay. The writer helped to train the coders who collected the data for the study and also acted as one of the reliability checkers during the data collection. The behaviors are included because they have an empirical research base already and they have shown consistently positive relationships with student learning. Project Quest findings confirmed these relationships. Also, many teaching skills included in Teaching Effectiveness Programs, such as the program offered by Edmonton Public Schools, have been presented in the text and videotapes.

The set of thirty videotapes is available from the School Book Branch of Alberta Education. (See page immediately following the title page for purchasing information.)

Eleven classroom teachers from grades one to twelve generously allowed us to videotape them in action. In some cases, a half day's instruction was videotaped. Because of their professional contribution the kit is able to provide numerous examples of specific teaching skills. Eleven lengthy - up to fifty uninterrupted minutes - "visits" to their classrooms have been prepared. This gives the user the option of watching a portion or all of each classroom visit tape. The remainder of the tapes demonstrate conferencing techniques.

Thus, the tapes are intended to be used in conjunction with this printed text, preferably in a group inservice setting. Basic information and classroom examples are presented in some of the tapes while other tapes of classroom instruction are to be used for coding practice by administrators who are refining their classroom observation and evaluation skills.

The writer offers no apologies for the length of the manual or the videotapes. The Kit is intended to function as resource material and it is presumed that it will be used over a period of time. For example, the Teacher Effectiveness program in Edmonton operates from September to May and holds 17 half day inservices. Therefore, it is definitely not recommended that you digest all this information quickly. The value in using the materials comes from exploring and discussing these ideas with colleagues and from gaining experience in gathering data from the videotapes or in a classroom setting.

VIDEOTAPES CONTAINED IN THE KIT

The organization of the manual follows the organization of the tapes so that the two resources can be used together. The call numbers, titles, the chapters in which the twenty-five tapes (produced and edited by the writer) and the five additional practice tapes appear follow:

CHAPTER ONE

Tape No. 1-1 Accession Number: ______________

Introductory Tape

Dr. Laurie Mireau reviews some classroom research trends which have yielded promising directions for supervisors of instruction. The role of the supervisor, particularly as a classroom observer, is considered in detail. Characteristics of the effective classroom observer and some "Do's and Don't's" of observation and conferencing are also presented. (25 minutes)

Tape No. 1-2 Accession Number: ______________

Test Tape

Before working through the activities in the entire kit, administrators are requested to view this 15-minute segment of classroom teaching (Heather Lynn, Grade 2-3) and to prepare a set of formal statements about what was observed. This exercise is to be repeated after working through the kit. (20 minutes)

Tape No. 1-3 Accession Number: ____________

The B Conference

Elizabeth Harrison, a Teacher Effectiveness Consultant, and Heather Lynn, Grade 2-3 teacher, model both an A Conference (reinforcing the teacher on the effective use of a particular skill) and a B Conference (generating alternatives together for the use of the same skill in a future lesson). (34 minutes)

Tape No. 1-4 Accession Number: ____________

The C Conference

Elizabeth Harrison, a Teacher Effectiveness Consultant, and Merv Tuplin, Junior High School teacher, model both an A Conference (in which the teacher is reinforced for the effective use of a particular skill) and a C Conference (in which the teacher requests assistance with the implementation of a different skill and they jointly develop ways of using this skill in a future lesson). (35 minutes)

Tape No. 1-5 Accession Number: ____________

Conferencing With a Teacher in Difficulty

Peter Carstensen and Susan McKenzie, Instructional Processes Consultants, demonstrate approaches recommended for conferencing with teachers experiencing problems. At intervals they explain the rationale behind the particular procedures and counselling techniques they are using and they role-play several conferences occurring between a supervisor and a teacher. (52 minutes)

CHAPTER TWO

Videotapes 2-1, 2-2, 3-1, 3-2, 4-1, and 5-1 are instructional in nature. Particular teaching behaviors are explained to the viewer and several examples of the behavior in use are presented to illustrate each behavior.

Tape No. 2-1 Accession Number: ____________

Classroom Management Skills

Dr. Laurie Mireau examines the pertinent aspects of many classroom management skills and supplements each explanation with illustrative video clips taken from lessons taught in eleven public school classrooms. (47 minutes)

Tape No. 2-2 Accession Number: ____________

The Power Struggle

Glen Haug, Teacher Effectiveness Consultant, demonstrates what to do and say when engaged in a power struggle with a student. Vignettes have been role-played with seven high school students and Glen debriefs the methods used at various points in the video tape. (43 minutes)

CHAPTER THREE

Tapes No. 3-1 and 3-2 Accession Numbers: ________ and ________

Instructional Skills

Dr. Laurie Mireau explains the main characteristics and rationale for the use of many classroom instructional skills. Each explanation is accompanied by several examples chosen from the videotaped lessons of eleven classroom teachers. (52 minutes and 55 minutes)

Tapes No. 3-3 and 3-4 Accession Numbers: ________ and ________

Student Engaged Time

These two tapes each contain three segments of classroom teaching focusing on two students for approximately 15 minutes. The tapes afford the observer the opportunity of coding "student engaged time" and assessing the percentage of on-task behavior in a variety of classroom settings. (43 minutes and 48 minutes)

CHAPTER FOUR

Tape No. 4-1 Accession Number: __________

Verbal Interaction Skills

Dr. Laurie Mireau highlights verbal skills used in questioning students and in reacting to their response efforts. Examples of these skills in use have been selected from the videotaped lessons of eleven classroom teachers in Edmonton Public Schools. (47 minutes)

CHAPTER FIVE

Tape No. 5-1 Accession Number: ____________

Interpersonal Skills

Dr. Laurie Mireau briefly describes selected interpersonal skills and presents examples of these skills as demonstrated by the eleven teachers who were videotaped during classroom instruction. (57 minutes)

Tape No. 5-2 Accession Number: ____________

Teacher Handling of Controversial Issues

Ric Rosborough, Perspectives for Living. One lesson is included in this tape showing how class discussions on controversial issues might be handled. (36 minutes)

CHAPTER SIX

All tapes in Chapter Six function as classroom visits. They are meant to be used for coding observational data.

Tape No. 6-1 Accession Number: ____________

Grade 11, Biology

Peter Harris, Biology 20. Following a field trip to the Saskatchewan River bank, Peter provides his students with additional background information on pollution control measures used by the City to monitor the amount of pollution in the river. (59 minutes)

Tape No. 6-2 Accession Number: ____________

Grade 11, Mathematics

Marilyn Nicholas, Math 30. Marilyn presents the binomial theorem to her class and assists them in understanding the derivation of the formula and in using it to solve equations. (43 minutes)

Tape No. 6-3 Accession Number: ____________

Grade 1, Language Arts

Faye Kay. Faye's students begin the day by working independently, under her close supervision, on several language arts tasks before participating in a lesson addressed to the whole class. (55 minutes)

Tape No. 6-4 Accession Number: ___________

Grade 5-6, Language Arts

Jim Johnson. Jim begins the afternoon with a class discussion combining the topics of peer pressure and problem-solving after which the class moves on to a creative composition period. (48 minutes)

Tape No. 6-5 Accession Number: ___________

Grade 12, Mathematics

Ted Thresher, Math 33. Ted reviews quiz questions on quadratic functions with the class and then moves on to teach the formal procedures to be used when solving equations using complex numbers. (60 minutes)

Tape No. 6-6 Accession Number: ___________

Grade 10, French

Denise Tremblay, French. Denise reviews the verb conjugations of être and avoir in a game and then teaches how to use these verbs to form the passé composé tense. The class is conducted in French. (55 minutes)

Tape No. 6-7 Accession Number: ___________

Grade 8, Science

Ric Rosborough, Science. Ric conducts an oral review of the concepts studied in the last science unit in preparation for the end of the year exam. (32 minutes)

Tape No. 6-8 Accession Number: ___________

Grade 7, Art

Ron Wigglesworth, Art. Ron assists his students to sharpen their observation skills through a series of exercises. After a surprise visit by two "creatures" the class is asked to draw what they have been able to observe. (43 minutes)

Tape No. 6-9 Accession Number: ___________

Grade 7, Mathmetics

Merv Tuplin, Mathematics. Merv assists students in locating the variable in English story problems and in translating these problem statements into accurate mathematical equations. (25 minutes)

Tape No. 6-10 Accession Number: ___________

Grade 2/3, Mathematics

Heather Lynn. Heather works with the Grade Two's to review the use of the long and the short hand in telling time and the students are given a worksheet to complete while Heather works with the Grade Three's on three-digit addition. (50 minutes)

Tape No. 6-11 Accession Number: ___________

Grade 1, Language Arts

Helen Mills. Helen reviews spelling words with the class and assists them in completing an exercise sheet using these words. Helen reads them an animal poem and the students then modify the poem by inserting their favorite animal instead. (49 minutes)

The five additional practice videotapes are described in Appendix I, Chapter Six (page 6 - 36).

Process Variables

These teacher behaviors, or process variables (in use during the process of teaching and learning and affecting the product - student outcomes) represent the technical aspects of teaching. The focus is on those behaviors that are specifiable and observable (and alterable!) so that their presence or absence can be documented objectively by the classroom supervisor and, if necessary, changes can be implemented.

UNDERLYING PHILOSOPHY

A baseline reading of how well each behavior is being employed is a kind of diagnostic evaluation of what is. As such, an initial look becomes a summative judging of the teaching performance at a point in time. If the evaluative process ends at this point (after impressions have been shared with the teacher) a judgment regarding teacher competency has been made - usually in the form of a written report. If the assessment is part of an ongoing process for teacher improvement, the judgment is used to determine which teaching behaviors will be the focus for change and improvement with assistance from the supervisor. While this is a simplified distinction between "summative" and "formative" evaluation, and while there are justifiable reasons why they should be kept separate, the administrator is frequently placed in a position where this is not possible and he/she must strike a workable balance between these two responsibilities.

If one considers the initial reading as a judgment call that may be used (a) in making a final decision or (b) as a starting point for review and revision then the two poles of evaluation tend to come fairly close together. Whether the evaluation is "summative" or "formative" is a function of the decision the supervisor has to make. If the data collection can serve either purpose, then it logically follows that both purposes can be served. However, the two parties involved need to be fully aware of said purpose, for a much broader-based data collection is required for summative evaluation, particularly in cases where the decision about performance may be disputed in a legal setting.

The writer appreciates the inherent difficulties facing supervisors who are charged with performing both roles, but the reality operating in the field often demands this. In fact, the highly skilled administrator is already doing both. By adopting this stance - that of taking a dipstick reading of observed instruction and deciding how adequate it is - it is possible to use these materials for either purpose, summative or formative. It seems probable that this same core of strategic instructional behaviors should form the basis of teacher education programs, teacher internship programs, teacher effectiveness programs, and teacher evaluation programs. (The writer has been a member of a university faculty of education, a supervising teacher, an instructor in a teacher effectiveness program, and has been involved in various aspects of data collection and teacher evaluation (including a termination case), and is convinced that the same set of behaviors should be the focus for all four endeavours.)

Historical Overview of the Study of Teaching

Researchers have been trying to identify the key teaching behaviors for many years and have not yet produced definitive results although many promising hunches continue to emerge. Initial efforts attempted to describe preferred teacher personality characteristics (which applied equally well to taxi drivers and waitresses) but it was difficult to translate these into observable behavior. Teacher competency tests, which actually tested for minimal literacy and knowledge of subject matter (and not for professional, technical knowledge) were administered in the hopes of revealing critical teacher attributes, to little avail. It has always been tempting to conclude that student achievement marks are a fairly direct result of teaching performance and these too have been used as indicators of effective teaching. This approach holds teachers accountable for pre-existing differences over which they have little control (former classroom situations, home background, peer influences). You can't get blood out of a stone.

The unfortunate effect of using student achievement as a teaching performance measure is "teaching to the test" all year long so the average class mark can be raised. A more promising line of research examined the relationship between process variables (what teachers say and do) and product variables (usually only one; achievement tests). While positive relationships were found for a number of variables, causal relationships could not be proven so pieces of information are still missing although extremely valuable contributions have been made through Process-Product studies. Direct instruction methods and mastery learning approaches have led to the advocacy of specific teaching strategies which work well in particular circumstances. Effective teaching programs use our best research hunches and acquaint teachers with a variety of successful techniques that can be selected for use as the situation warrants. Decisions about when to use which behavior are vital. Focusing on the behavior of students has led to a rethinking of how to maximize academic learning time and how to achieve greater clarity by more purposeful planning and presentation. Direct instruction methods have been based on these research findings. Studies of teacher thought processes (including what teachers are thinking while they are teaching) have expanded our knowledge of instructional skills.

Project Quest

It may be of interest to digress for a moment and explain some of the historical background of the Centre for Research in Teaching (CRT), formerly in the Faculty of Education, University of Alberta, Edmonton. One of the reasons for the establishment of the centre in 1975, under the direction of Dr. Al. MacKay, was the promotion and encouragement of observational studies in naturalistic/classroom settings. An interdisciplinary sharing of ideas, methodologies, and instrumentation was fostered by those associated with CRT and this was of great value to faculty who conducted studies and to graduate students who were engaged in their doctoral research projects.

In 1978-1979, in collaboration with the Edmonton Public School Board, CRT undertook an observational study of teaching strategies as exhibited by 60 classroom teachers in the city of Edmonton. In many aspects the study replicated the large-scale, observational studies conducted in the United States. Ten visits of about one hour's duration were made in each classroom during the course of the project. A study conducted on this scale required many forms of data collection and many classroom observers to collect them. This present kit would have been most useful to us (CRT personnel) in the planning and training stages of the Project Quest (Quasi-Experimental Study of Teaching) Study. It could have oriented the classroom coders more readily to the kinds of behaviors they would observe in the classrooms and would have assisted in the development of competency in coding skills. It would have ensured more immediate understanding of the teaching behaviors under study by providing real examples of teaching on video tape and an appreciation of the variation one could expect to find when observing in the classroom.

All measures used in Project QUEST, dealt with observable skills. Some were less easily spotted and recorded due to inherent subtleties such as teacher empathy toward a student. These "high inference" behaviors caused the most difficulty in defining and reaching acceptable levels of agreement about them. More readily observable "low inference" measures could be recorded on checklist forms and were less subject to disagreement and confusion.

From experiences gained in the preparation of the coders for this study, in helping to supervise their work and data collection, and from subsequent experiences in retraining a smaller number of the same coders the next year for two different practicum program evaluations (conducted by CRT) requiring the collection of observational data, this learning package was developed. The teacher behaviors under examination in Project Quest are all included in this Kit. They were chosen from a more comprehensive list of process-product research findings, particularly from Austin, Texas and Stanford, California. These variables were selected by Dr. Al MacKay for Project Quest because they had an empirical research base already and had consistently shown positive relationships to student learning. In the main, these variables were shown to be positively related to student learning in the Alberta context. One is hesitant to pick a certain number of behaviors for it might be assumed these are the only important ones. They were chosen for the strength of their positive relationships and 27 seemed to be a manageable number for conducting the Project Quest research study. As in preceding studies, strong positive relationships were found between the presence of particular teaching behaviors and student achievement results.

Teacher Effectiveness Program

Interspersed throughout the Kit are related suggestions taken from the Teacher Effectiveness Program as it is offered in Edmonton Public Schools. Volunteer teachers and principals participate in the program for a full school year and attend regularly scheduled inservice sessions. They sharpen teaching, observation and conferencing skills as they work together in their own school setting assisted by a consultant who works with the participants in both the classroom and in the conference following the observation. The following year two more participants from the school attend the inservice and are observed and conferenced by participants trained previously.

The main intent of this learning package is to increase the administrator's confidence and proficiency in a series of observational skills which serve only as a "starting point" for the evaluation of classroom instruction.

What Do We Know?

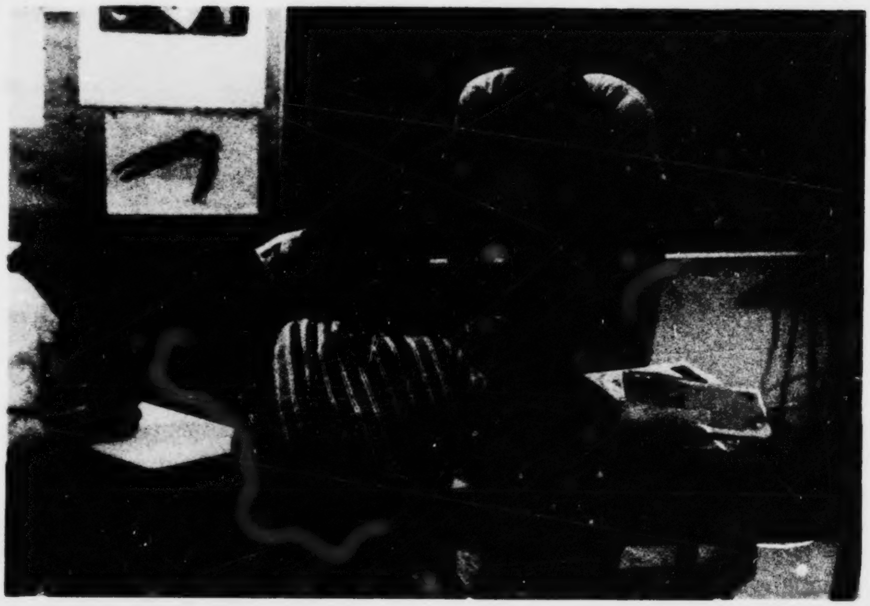
Practitioners are greatly encouraged because a wealth of information on effective teaching behaviors, substantiated by practical research, has emerged over the last decade. The technology of teaching is systematically undergoing clarification and classification into manageable chunks that are observable and specified and therefore useful. The purpose of this learning package is to examine a selection of these behaviors identified as "critical" in the literature and in practice, and to describe the most salient characteristics of each one so that a supervisor can use this information to assess the extent to which a teacher is using this behavior to advantage in the classroom.

Gephart and Ingle (1982: 108) remind us that there is no single right way to teach. There are ways that will be effective when used by some teachers with some students on some subject matter. Stodolsky (1984) urges that we observe for teaching skills which are embedded in a context such as Language Arts or Science and warns that looking at these skills in isolation could lead us to erroneous conclusions. Costa and Garmston (1985) contend that it is fallacious to presume that teaching can be reduced to scientific, quantifiable values. Keeping these cautions in mind, our intent in the kit is to examine teaching skills in isolation in order to become better informed but we must remember that these skills are not context-free and that teaching is an integrated process not just a function of stringing one skill after the next. Teacher decision-making (about when to employ which skill) is, after all, the most important criterion of excellence in teaching but this presumes that the teacher is knowledgeable about and proficient in using a wide variety of instructional techniques and employs these when the teaching situation warrants their use. Costa and Garmston state that the main aim of the supervisor should be to encourage the teacher's intellectual skills, to call attention to discrepancies in their teaching, and to pose problems requiring a response. Therefore, you are not only emphasizing overt teaching behaviors but you are also enhancing the teacher's cognitive abilities by encouraging inner thinking processes as well.

Manatt reminds us that high impact managers do not treat all employees alike. They figure out the task maturity of the teacher and then determine what management style to use with them. They will be very specific and stern with some, will use management by objectives techniques with others, and with still others they will ask "How can I help you?" The bottom line is you do not treat all teachers alike. It is neither feasible nor fair to the teacher to rely on one, inflexible, all-purpose list against which to assess every teacher's performance. Remembering the process we used to assign an end-of-term social studies mark to a particular student may help us to make the kinds of teaching evaluation decisions which are both fair and feasible.

It is tempting to conclude that someone must have developed a generic set of behaviors (a magic list) that can be used in each classroom. The frenzy to locate the perfect classroom observational instrument attests to this. In fact, the use of each behavior is "situational" in that contextual factors influence when such use would be appropriate and beneficial. Therefore a selection of which behavior is of prime interest to you has to be made before you can design an instrument to use.

The supervisor must appreciate contextual needs and be able to judge the appropriateness of gathering data on specific skills at a certain time. This flexibility should also be reflected in the construction of observation instruments, which should not dictate too rigidly the methods and substance of the data collection. Obviously, decision-making on the part of the supervisor is a valued skill in this regard. A basic core of skills - on a very global level - would be in operation during any lesson. Thus, the purpose of the package is to delve into selected teaching behaviors so their characteristics may be identified more accurately, so a wider repertoire of teaching skills will be considered, and so more objective evaluations of teaching performance will result.



CLASSROOM VARIABLES

I. Information Properties
a. Information source:
Teacher or pupil, person or material, continuous vs. intermittent. (Teacher lecturing, films, many or single sources.)
b. Information content—substantive, procedural, socioemotional (humor)

II. Task Properties
a. Readability: reading level of materials used
b. Task difficulty:
Number of errors made by pupils on task questions, or percent of pupils that complete the task, time taken to complete the task.
c. Level of abstractness:
Concrete, physical manipulation, specific reference (a diagrammed sentence, map, what happened on playground yesterday) or concrete prop, verbalizing, operationalizing with abstract symbols (freedom-equality discussion, math symbols).
d. Cognitive level:
Facts, concepts, principles, problem solving, synthesis.
e. Structure:
Many small and clear steps, explicit directions, much feedback vs. few steps, directions; open; little feedback prior to completion of task. (Oral—lot of internal summaries, advance organized, post presented summary.)
f. Task activity press, "active learning":
Time directly interacting with teacher, material, pupils vs. vicarious observing, listening, reading silently.
g. Choice: availability of options
h. Interest, relevance of task
i. Task variety:
Variance of demand and mode and activity.

III. Response Properties
a. Written, oral, physical
b. Individual—group
c. Public vs. private
d. Competitive—cooperative

IV. Feedback Properties
a. Source: teacher, materials, peers
b. Target: individual, group, class
c. Wait time (availability of teacher for monitoring, etc.)
d. Informativeness: no feedback, correctness of answer (right—wrong), redirect (probing), diagnose, correct and explain
e. Length: restricted vs. overdwelling
f. Person or task
g. Sign: +, 0, −

V. Structural Properties
a. Group size
b. Location: nearness to teacher, materials
c. Mobility of students
d. Physical environment
e. Population density—crowdedness

VI. Temporal Properties
a. Wait time
b. Stage of learning: development, practice, review
c. Length: duration of activity setting (time on each session of group work, peer tutoring, etc.)

Adapted from Good, T., and Power, C. "Designing successful environments for different types of students." *Journal of Curriculum Studies*, 8 (1976), 45–60.

Looking in Classrooms - Second Edition. Thomas L. Good and Jere E. Brophy, New York: Harper & Row, Publishers. 1978. page 308

EVALUATION

Goals And Roles

Evaluation must be focused on the goals educators are trying to achieve. While all school districts are striving to provide the best possible educational experience for students, they may emphasize slightly different goals and these set the directions followed by teachers. Procedures and instruments used in data collection must match the purpose statements of the district or, as the observer, you will be measuring things teachers are not even trying to do. The following is a collection of goal statements. As you examine them, think how the translation into practice may result in different teaching methodologies and specific behaviors.

1. to ensure students learn basic skills
2. to help individual students solve problems
3. to develop initiative and responsibility among students
4. to develop aesthetic potential of students; to encourage creativity
5. to foster ethical responsibility and moral growth
6. to foster self concept; social growth
7. to develop attitudes and values in students
8. to produce critical consumers
9. to provide a good learning environment
10. to create enthusiasm for subject matter; to promote life-long learning.

For example, a teacher pursuing goal #3 may use different disciplinary skills than a teacher who was emphasizing goal #1. More teacher direction and structure would be in evidence as the teacher maximized the time spent on learning basic skills (goal #1). More time is required to teach students that there are logical consequences for the behaviors they choose (goal #3). A teacher pursuing goal #6 would probably encourage group work so students could learn to share, discuss, and work cooperatively together. These goals are not mutually exclusive and all are worth pursuing but, given time constraints and philosophical preferences, priorities have to be assigned. For observational procedures to be successful they have to be related to the particular goals of teaching being observed and must be appropriate for the context in which data are collected. It is important to know the particular goals and expectations held by the classroom teacher for they determine the teacher's own criteria for effectiveness and they govern teaching behavior.

In attempting to achieve broad goals, teachers may adopt many different roles. Perhaps one role is favored over others because it is judged to be more effective and feels more comfortable. As you examine several examples of roles and teaching models presented below, consider how the specific teaching behaviors would differ when particular roles are assumed. A list of teaching roles might include:

lecturer
tutor
programmer
demonstrator
expert resource person
facilitator of learning
manipulator of learning environment
manager of media instruction
laboratory supervisor
diagnostic technician
discussion leader
coordinator of small group work
counsellor
maintainer of orderly classrooms
role play/simulation director
individualization instructor

The context exerts an influence on teacher behavior and must be noted in addition to any constraints or special conditions which apply. The type of students or the mix of students in a class must be described, for a split grade 4/5 class with 29 students as opposed to a grade 4 class with one behavior disordered and one learning disabled child in the 25 students will certainly require different specific teaching behaviors.

Very obviously, the approach one uses in performance appraisal should be situational. "What are we looking for?" and "How is it to be measured?" should be adjusted to suit the circumstances. There is no one correct way to teach students and there is no one correct way to evaluate teaching. It is possible to maintain standardization of data collection at a general level yet allow for individualization at a more specific level.

Evaluation Is

Evaluation has been defined variously as:

- involving more than measurement; making judgements of results and behaviors in light of pre-determined and well understood objectives.

- based on attitudes and beliefs of individuals/groups, but in the last analysis is based on human judgment.

- a personal and individual estimate of what is and what should be

- a process of determining the worth or value of something. It is a specific task that is based on and reflects values in a particular location.

- tailor-made assessment which suits a particular set of circumstances.

- the annual "show down".

What is clear from all these definitions is that a judgment of "satisfactory/non-satisfactory" followed by "to what degree" and "in what ways" must be made.

Purpose of Evaluation

Manatt provides us with a list of reasons why we evaluate classroom teaching:

- to improve faculty productivity and student achievement
- to improve teaching and administration
- to supply information leading to modification and change of assignments
- to protect students from incompetent teachers
- to reward superior performance
- to validate both teacher and administrator selection processes
- to provide basis for planning and professional development.

He reminds us that although we may have attained the "already good enough" level of performance, we can still improve. Gretsky still practices each day. The main purpose, therefore, is to work at refining the quality of classroom instruction. Although judgments and decisions must be made from time to time, the process of evaluation should provide support, assistance, and encouragement for the classroom teacher.

Problems of Evaluation

Given the complexity of the task it is not surprising that a number of problem areas have surfaced. The first argument against our present methods of assessing the skill of a teacher is that the teacher is not able to influence student learning as much as we would like to hope. Studies suggest that as only 30% of the differences in achievement can be attributed directly to schooling and a substantial amount of the 30% is probably due to peer influences. One would hope this is not indeed true. The heart of the teacher accountability concern is based on the presumed linkage of teaching skill to student achivement. The usual product measure, Standardized Achievement Tests, may not reflect what has been taught and they tend to correlate more directly with intelligence. Student background factors are highly correlated with achievement. Teachers feel very threatened when student achievement results assume prominence as a criterion of effective teaching. Gephart and Ingle (1985:108) state that ability level and prior achievement of the student assigned to the teacher are context variables which must be considered in teacher evaluation. All teachers consciously work toward maximizing student learning but at times their best efforts have minimal impact.

Soar, et al (1983:240) offered the following analogy. We usually evaluate technicians (plumber, auto mechanic) on the basis of the results they produce. However, we do not judge professionals (lawyers, dentists, physicians) in this manner. We decide whether the professional seems to be following what is judged to be the best practice in a given situation. Problems encountered by a technician are likely less complex. A lawyer finds certain cases more difficult than others. In like fashion, teachers find it harder to succeed in some teaching situations. Given the raw material (students) it would be difficult to achieve results beyond what is reasonably possible with particular groups of students.

Another perceived problem with teacher evaluation is the implicit (and accepted) assumption that the judges "know what good teaching is" and can recognize it when they see it. Present practices attribute too much importance to one person's judgment. Questions such as "Who is the evaluator?", "How does he respond to the teacher?", and "How well does he perform the task?" become rather crucial. Manatt suggests that up to now teacher evaluation has been a solo venture akin to taking a bath; you never get to watch anybody else do it. Modern training techniques for evaluators allow others to watch and learn.

Evaluation can be as much a reflection of the supervisor's bias (more on this later, page 1-31) as it is a true appraisal of the teaching act. It may be a rather idiosyncratic exercise. As Good (1980:34) reminds us:

> It is easy for an observer to project his own sense of reality onto what is taking place, unless there is a concerted effort to reliably collect information and describe events rather than try to evaluate or interpret them immediately.

On the other hand, we cannot realistically expect to come up with a single observational system (at least not a very specifically detailed one) suitable for all situations. Completely unique instruments do not need to be used in every classroom. Good suggests that may be 75% of a coding sheet will be common enough for all. Research has yielded very useful information about promising indicators but this information must be applied, with good decision making, to evaluation, taking various factors into consideration and using what seems appropriate. We will probably never develop a universal observational system and one might question the value of doing so.

Little uniformity is found in teaching behavior across teachers or even with the same teacher. Good (1980:1) maintains that teachers display vast numbers of differences in exhibited behaviors. These may look the same but the actual use of time, group work, or whole class instruction have many variations in classroom practice.

Stodolsky found that teachers used different instructional arrangements when they taught another subject. Certain instructional formats are unique to each subject area. Elementary teachers create a broad repertoire (or organizational and pedagogical arrangements) and their teaching is characterized by flexibility of approach tied to subject matter. If we recognize this lack of generalizability we impose serious limitations on our ability to evaluate teaching. Stodolsky contends that molecular views of teaching are invalid. We need to remember her warnings lest we walk away from this kit believing that all teaching can easily be categorized into the behaviors we have chosen for study here. In fact, diversity in teaching styles should be advocated as teachers try to fit instruction to student needs. Our data collection devices must attempt to reflect the teacher's freedom of choice and best attempts to meet instructional challenges. Using a standardized instrument may betray limitations in our own thinking.

Teacher evaluation often appears to serve an organizational maintenance function rather than a teacher improvement function. Many proactive teaching behaviors are ignored on observational instruments. Teachers should be given due credit for resourcefulness, flexibility, and intuition in their instructional approaches. An examination of some teacher qualities often used on summative rating scales reveals a preference for conformity and the adoption of standard (better known) techniques. (e.g., "responsible, punctual, dependable, adaptable, cooperative"). Hopefully, one can also find "originality, innovation, creativity, and initiative" as criteria for rating a teacher.

Another expressed problem is that teacher evaluation takes too much time and costs too much. To Manatt's way of thinking,

> Ineffective schools take too much time; up to 13 years for your children and mine. Ineffective teachers cost too much. A 23 year old teacher granted tenure, despite his or her low quality teaching, will cost a school board well over a million dollars before he/she retires. Good performance appraisal doesn't cost, it pays!

What Evaluation Should Be Like

The ultimate goal of teacher appraisal is to maximize opportunities for student learning in the classroom. It can be used to motivate teachers, to monitor classroom performance, and to support and encourage the teacher as new approaches are implemented. We should use procedures that have undergone empirical development, to gather data focusing on performance. To zero in exclusively on specific teaching actions would be misplaced precision but a balance between general behavior patterns and particular situational techniques should be obtained. Eisner (1976:140) likens teacher evaluation to procedures used by art, symphony, and dance critics who prepare reviews. They perceive integrated patterns, relying on their accumulated experiences, cultural knowledge, etc., to look for holistic qualities of the act. What criteria do they use to decide whether the performance was of high quality? Presumably they notice specific skills, patterns of skills, and interrelationships among them. The composite picture is formed by considering many details as well as the total overall effect. Eisner advocates the development of "educational connoiseurship" in the evaluation of teaching.

Good (1980:38) recommends data gathering over three or four consecutive days. Any less time is insufficient to assemble data of many kinds and to develop a comprehensive assessment of teaching performance. Instead of spreading the three or four day observation allotment over an extended period of time, consecutive days would allow the observer to answer such questions as:

Did the the teacher communicate the purpose for the learning activity?

Did the activity actually correspond with the purposes that the teacher had stated.

To what extent did the teacher build upon previous lessons and use concepts that students have already learned?

Did the teacher include appropriate review and opportunities for successful practice?

Are there discrepancies in communication occuring between the teacher and students?

This process would result in a more holistic assessment of what is taking place. Observing a teacher over several days is a high expectation for supervisors but it may be an appropriate expectation, particularly in cases where specific problem areas are being diagnosed. Visiting once in three years may not be enough. Sweeney and Manatt suggest the following schedule: visit poor teachers frequently and formally, visit average teachers infrequently and formally, and visit superior teachers frequently and informally.

Both Manatt and Sweeney recommend that a teacher, chosen for supervision this year, should receive a minimum of three visits totalling at least 6-8 hours per typical teacher (includes pre-observation, observation, conference, and report writing). They question whether it is possible to visit all your teachers annually in this way. Work with some this way one year and "spot check" them next year. A cycle may be better. Spend more time with less people instead of spray painting everyone. Have some of your teachers working on job improvement targets ("JITS", Sweeney, Manatt) and plan to evaluate others.

Validity

The extent to which the observation instrument measures what it purports to measure is known as its validity. Do the differences in scores obtained by students on a math test reflect actual differences in knowledge? or reflect the math curriculum the teacher has actually taught? How much confidence can you place in the information you get? How much truth does this information contain? For example, rating scales are frequently used to obtain numerical scores about teaching behavior. Every statement on the scale should be examined for its empirical (research-based) relationship to student learning.

Statements concerning "the tidiness of the classroom," and "teacher appearance" have not been shown to be related to student learning in large scale, classroom observational studies, yet they regularly appear on district rating scales. "Having a positive regard for learners" is certainly desirable but shows only a weak positive relationship to student learning from empirical classroom studies. As you might expect, these statements have shown positive relationship to classroom climate in studies. However, classroom climate is not the same dimension as student learning gain. Such statements reflect a districts' beliefs and preferences and they are important for this reason, but they are not valid indicators of teaching performance based on extensive research to date. Valid items would include statements like "actively involved students in academic tasks", "introduced lessons by stating the purpose of the new learning and relating it to knowledge students already possess," and "conducting speedy, well-organized transitions from one learning actively to the next." These statements ask for a judgement on the extent to which a teacher maximizes student engaged time, and prepares students to acquire new information. These teacher behaviors have consistently produced positive correlations with student learning. The validity of rating scales is rarely questioned by a careful examination of the items in them. If statements about effective teaching are valid, and the methods of collecting data about them are valid, then the information gathering procedure is considered to be valid.

Reliability

Reliability refers to the consistency of performance over time. Reliable people are people on whom we can depend. A dressmaker's cloth measuring tape becomes useless once it begins to stretch (as mine did) for it no longer produces reliable measurement results. Also, the person using the instrument (tape measure) must perform the task in the same way consistently or the results will be unreliable. The operating rules must be applied in the same way over time and short cuts and sloppy habits ("coder drift") must be eliminated. In research studies, questions posed to subjects are sometimes tape-recorded so that voice inflection and emphasis on certain words will remain constant for each participant. Two trained data collectors entering the classroom together to code data on the same instrument should produce very similar results. Before data collection for a study takes place (and also while it is ongoing) a "reliability check" is made to see whether the percentage of agreement between two data collectors is at an acceptable level. Obviously, the simpler the instrument the higher the expected percentage of agreement. Instruments with many categories will result in a lower coefficient of reliability. For example, on a highly complicated instrument, a reliability coefficient of .73 may not be all that unreasonable. A simple formula for computing the percentage of agreement is:

$$\text{Reliability} \quad = 1 - \frac{A - B}{A + B}$$

Count the number of items in a category that have been recorded by both coders. The higher score will be A. If coder one counted 12 instances and Coder two counted only 10....

$$\text{Reliability} \quad = 1 - \frac{12 - 10}{12 + 10}$$

$$\text{Reliability} \quad = 1 - \frac{2}{22}$$

$$\text{Reliability} \quad = 1 - .09$$

$$\text{Reliability} \quad = 91\%$$

If coders disagree on how to code a behavior and have classified the same behavior in two different ways, Holsti (1969:138) suggested using this formula to compute a reliability coefficient for coding "dichotomous decisions."

$$\text{Reliability} = \quad \frac{2M}{N_1 + N_2}$$

M = those decision agreed upon by the two coders. N_1 and N_2 refer to the total number of decisions made by each coder respectively. For example, Sue made 15 coding decisions in all. Tom made 17 decisions and they agreed on 12 of these decisions.

Reliability should be established before data collection begins by comparing -your coding decisions with a colleague during a series of "dry runs" by looking at videotaped teaching performances or by visiting a (victim) teacher who will allow you to practise coding in his room. Consulting research study summaries will give you a rough idea of what percentage of agreement is reasonable. Subsequent discussion can clarify the description of the behavior under study or can point out changes which need to be made in the coding instrument. Manatt has found that inter-rater reliability does not increase until at least three days (6½ hours per day) have been spent in guided practice with lots of feedback. For that reason, the training of teacher evaluators consumes great quantities of protocol materials, especially videotaped classroom visits.

From time to time it is advisable to recheck the extent of agreement between two supervisors who are using the same instruments to collect data. Over time some interesting variations in coding can occur and you must guard against these. Remember, the teacher has no fair recourse when negative judgments are made by you and you may be placed in an indefensible position in an ensuing appeal case. Our concern is to be fair and to render the best possible judgment as we prepare a summative report. Care taken in preparing ourselves for the role and for defensible supervisory procedures includes demonstrating a true concern for developing and maintaining valid and reliable data collection procedures in operation.

TYPES OF DATA COLLECTION

Once the focus of evaluation has been determined you have to choose among data collection methods in order to find a valid way to obtain the data you want. Data collection methods have been categorized several different ways.

Structured - Unstructured

Unstructured data collection should be rejected immediately - no matter how experienced and intuitive the supervisor is. As the name implies, it consists of "soaking it up" with no particular criteria in mind and writing a report on teacher performance based on general impressions. Our predecessors relied on this technique and many a teacher suffered for it with no apparent recourse or avenue of appeal.

In structured data collection, the observer watches for specific activities and counts how often they occur, describes the situation in a detailed factual way, and/or judges the quality of particular teaching behaviors.

Primary - Secondary Sources

Primary sources of data would be the teacher, students, colleagues. However, many intervening variables influence both the process of teaching and the various products of teaching.

Secondary data sources (or "proxy measures") are not as direct but we rely heavily on them to indicate effectiveness. They include using systematic observation procedures and descriptions to examine such factors as "organization of the classroom", "teacher planning", "clarity", "enthusiasm", or "how well students are paying attention". These are considered to be indirect measures of performance which reveal the relationships between "process" behaviors with "products" (usually student achievement data.)

Quantitative - Qualitative

Data that can be quantified and assigned a numerical value are used to verify the existence of a behavior. Quantitative research produces correlations (not causal connections) with an outcome (often student achievement) and thereby identifies which behaviors are effective classroom practices. "How can things be changed or improved?" is a quantitative research question. Tests, questionnaires, and checklists generate numerical data that can be processed using statistical analyses. The information does not provide an holistic account of the classroom data on teacher - held values, objectives for the lesson, or types of materials used, but instead, focuses on the relationships among isolated variables (often in highly controlled settings). There is a tendency to overinterpret particular behaviors because of their apparent influence on student learning.

Qualitative data explains "What is happening here?" The whole setting is examined, resulting in descriptions, understandings, and insights about as many different aspects as possible. Many types of observations, interviews, note-taking procedures and subjective techniques are used to reach an understanding of the context and the behaviors within that context. As such, the evaluation procedures may vary from context to context. Akin to an ethnographic approach in sociology, the observer goes in to "live with the natives" so teaching behavior can be better understood and therefore judged for its appropriateness. This does not mean that an "unstructured" approach is used. Because of the resulting "thick description" and lack of generalizability to other teachers' performance, the approach has been dubbed "too messy" and time-consuming to use.

If data collection is restricted to calculating the frequency of occurrence of certain behaviors, then important information that would allow us to judge the quality of talk or the appropriateness of action is masked. Of necessity (due to time commitments) qualitative research treats small samples in depth which makes supervisors (researchers) who wish to use comparisons very uneasy. However, teachers who have experienced this approach used for performance appraisal feel their situations have been understood. A teacher gets a much fairer "shake" when the particular contextual factors are considered, so this "situational" approach to evaluation has been gaining both popularity and respect. It is possible and desirable to combine elements of both approaches in your own supervisory exploits.

Topical - Timeline

Topical data collection records the existence of certain events - for example, the seven steps in lesson design or the use of wait time during questioning. A more common, and perhaps more useful method is timeline data capture. Any changes in the lesson which mark the beginning of a new segment are identified and the amount of time allocated for each part is noted.

High - Low Inference

A "high inference" instrument, as its name suggests, requires the user to infer the degree to which a behavior or characteristic should be attributed to a teacher. Usually these traits and behaviors being rated are not as concretely obvious which is why an inference is necessary. What does a teacher do and say when displaying "warmth" and "enthusiasm" (versus what a teacher does and says when "sharing an objective with students," summarizing the main points of a lesson", or "providing verbal academic feedback")? More disagreement (and therefore lower reliability coefficients) can occur when two observers are rating a teacher on high inference variables. The "proof" of existence is harder to establish and is more subject to interpretation and the supervisor is required to take a mental leap or follow stomach-level intuition about what "feels right" in order to reach a decision. Such a process is hardly defensible (in the view of a judge at a Board of Reference hearing) but it serves us well in daily life as we try to decide what choices and decisions to make. Many of the variables included on teacher evaluation instruments are high inference so the first task is to see if a listing of sub-behaviors can be specified. For example, one researcher subdivided "enthusiasm" into eight fairly detailed behaviors that are all aspects of teacher enthusiasm. By considering many indicators it is possible to feel more confident about the rating assigned.

Low inference instruments focus on those behaviors that can be seen, heard, counted (not inferred), and agreed upon with a minimum of confusion or disagreement. Low inference instruments identify the standard teaching tasks developed through research on teaching, in scorable form. This information helps us to study the structure of teaching. Verbal interaction instruments which record whether a teacher acknowledged a student answer or not - or asked an additional question - are low inference instruments. Flanders Interaction analysis is a well known example. The dangers of relying completely on low inference data is that a fragmented, atomistic picture of teaching is developed, but this must be re-integrated so that patterns or "clusters" of teaching behavior (teaching styles) can emerge.

Instruction is too dynamic and complex to be assessed by using only one measurement method. Not all techniques provide the same type of information and a balance should be sought. The relationship among the types of information, and the validity of the information to be gathered must be considered before an informed selection of instruments for teacher evaluation can be made.

RATING SCALES

Rating scales are used so extensively in evaluations that a discussion concerning their relative merits and limitations has been included. They usually consist of a series of statements to which an observer must react and indicate his agreement or disagreement. In the case of teacher evaluation, the statement is meant to describe an important aspect of teaching (hopefully based on valid assumptions about effective teaching behavior) and the rating indicates the degree to which the teacher is perceived (by the observer) to exemplify this behavior. The observer watches teaching performance and combines his impressions into a composite picture of behavior. Then this is compared to the observer's (and/or the district's) own personal standard of effective teaching and a numerical rating is assigned. Manatt suggests picking one of four categories to describe the overall judgment rating of total performance:

(1) exceeded district standards
(2) met the district standards
(3) needs help meeting the district standards
(4) did not meet the district standards.

A "must improve" or "needs help" category legally alerts the teacher to a problem. Comments following the rating should specifically address the areas in which improvements are needed and the ways these changes might be effected.

In most cases, ratings reflect beliefs about the nature of competent teaching performance, not the actual competence of the teacher being rated. Ratings are subject to a "halo effect" that minimizes trait differences. If the teacher has made an initially favorable impression on the observer, there is a tendency to view the teacher's performance as favorable on all dimensions. This leads to a consistent rating on all the statements in the instrument. (The halo effect can also lead to a consistently unfavorable set of rankings).

For example, consider the teacher who is attractive and very dynamic. Lesson presentations are exciting and highly motivating. It becomes difficult for the observer (caught up in the infectious enthusiasm) to remain objective enough to note that the "organization for instruction" may be deficient because not all the materials were ready and available, and that the "clarity" was not well exhibited because half the instructions were omitted and the teacher had to re-explain the activity to eight students individually. But the teacher receives a uniformly high rating on all dimensions.

Since only the final rating is publicly available, critics say this is evaluation without measurement.

There is a documented tendency for ratings to cluster at the high end of the scale. On a five point scale (excellent, very good, good, fair, poor) about 85% are rated as "excellent", "very/good", or "good". If most teachers fall into the "very good" category (and they do) the definition of "average" ("good") as we usually interpret it has been misinterpreted. One thing we do know for certain is that highly rated teachers make better impressions on observers than do teachers who are rated lower. Another interesting tendency occurs with self ratings. The poor teacher overrates herself and the superior teacher modestly underrates her performance.

If you are about to become more stringent about the way you assign ratings in your district, the teachers should be informed in advance that from henceforth a rating of "3", or "good" is acceptable. The descriptors of "5", or "very good" and "excellent" will be used sparingly and reserved for the truly outstanding.

It is significant that educational researchers of teaching effectiveness have abandoned the use of rating scales as data collection devices because they do not consider the information to be sufficiently reliable.

Since rating scales are so much a part of our current evaluation procedures and are likely to remain so, we should concentrate on limiting their undesirable characteristics and on providing supplementary data gathered by low inference instruments. (Our main focus in the manual is on low inference variables and on ways of concentrating on these observable, describable teaching behaviors.) You must be able to substantiate why you have assigned specific ratings.

Along the Continuum

Let us assume we are faced with developing a set of ten valid statements for our district to use on a summative, high inference rating scale. If a global rating is all we really need, give serious consideration to having only two ratings; "satisfactory" and "unsatisfactory." Most rating scales have a continuum which allows the rater to choose one of the points along the line that best represents his opinion. Sometimes the line is simply divided into three, five, or seven equal segments (with number one designated as the most or least indicative point) and a number is circled. Single words such as "poor", "fair", "good" can be used to describe points along the line instead of numbers (as well as groups of words - a description). Sometimes particular equidistant points along a line are not identified and the rater is requested to choose a place somewhere along the continuum (graphic rating scale).

Rating scales need descriptors (to guide the rater and clarify the meaning of each decision point) that are specifically developed to suit each item. What is really meant by "excellent?" Does it mean that "there is little room for improvement?" or that "the teacher is performing to the best of his ability in relation to the situation at hand?" What is really meant by "often" and "rarely?"; "75% of the time?", "10% of the time?" It is wise to avoid using extremes such as "always" and "never" for they are infrequently selected and this effectively reduces your number of usable scores by two. "Usually" and "rarely" are better terms, provided some clarification is also supplied.

Take care that the word descriptors used at opposite ends of the scale are not bi-polar,

apples oranges

dealing with two separate, but similar, variables. Ensure that you are asking for a "more-less" rating on only one dimension.

more apples less

In the way of a summary, the following points would suffice. Rating scales rely on a less objective approach to teacher evaluation. They depend to a large extent on the impression created by the teacher and are subject to "halo effects" whereby this general impression sways the observer's perception of other teacher characteristics. Items on scales are seldom subjected to a critical analysis which would differentiate those statements which are valid indicators of effective teaching performance from those statements which are preference and belief statements with no empirical basis (e.g., "tidiness of classroom", and "attractiveness of bulletin board display." An untidy classroom does not model good housekeeping, but fantastic achievement results may occur in this classroom.) Since most statements are "highly overrated", to use a familiar expression, one questions the validity of the information that rating scales produce. It is also probable that most Alberta school districts will continue to use them so they should be used with appropriate caution and should be substantiated by factually descriptive information gathered by other, more objective, means.

OTHER DATA COLLECTING INSTRUMENTS

Other methods by collecting data rely more heavily on specific observable teaching behaviors and will provide different types of information.

Teaching Skills Analysis Forms

If you and your colleagues could generate a list of generic teaching competencies that can be used in any Alberta classroom, please send it to the writer - the profession has been waiting for this breakthrough. But seriously, if you and your colleagues brainstorm the particular set of competencies that appear to suit the context in which you are supervising and if you break down these priority teaching behaviors into discrete, observable teaching actions, you have developed a category instrument.

Category Instruments

These instruments record the existence of specific behaviors and each behavior can be classified in only one category slot (e.g., Flanders Interaction Analysis). The total number of behaviors in each category can be calculated and, if related to elapsed time, frequency rates can be generated. You may instead just want to note whether any instance of this behavior occurred during the classroom visit ("sign" instrument) and one checkmark is placed beside each behavior that occurred (once or more than once). You could have a predetermined, weighted scoring key which distinguishes priority behaviors. The coder is not required to make inferences but simply to decide whether this is an example or not and to put a "dit" mark in the appropriate place. A category instrument could be in the form of a checklist or tally sheet with grid boxes that allow the collection of this data. Of course, when considered out of context of the total situation, a specific behavior makes little sense so it is vital that data obtained from low inference measures be combined and used in a meaningful way.

Mapping

This involves graphically depicting physical space in the classroom so that the teacher's movements around the room can be traced, or so the teacher's verbal attention, directed to particular locations can be noted (see maps, pages 4-10, 4-11, and 4-12). As the teacher walks around, the path followed can be drawn on the map or the student's desk can be marked with an X each time he interacts with the teacher. This data is of interest to the teacher who is not always aware of movement, of predominant verbal interactions, or of which students are being overlooked in question and answer sessions.

Anecdotal Records

Anecdotal records, or script-taking, are usually in the form of the observer's notes describing the activities going on in the classroom. The notes preserve the sequence of activities and highlight the main events in the lesson. (Verbatim notes record the verbal dialogue as faithfully as possible, given the speed of interactions.) Anecdotal notes are meant to be factual and descriptive and the observer is urged to defer any interpretation of the behaviors until later. Simply copy down what happened or what the teacher said and did, not what you think it must mean.

In the Teacher Effectiveness Program we teach our classroom observers to take anecdotal notes and/or verbatim notes. A margin to the left or right of the notes is reserved for labelling later on (see page 1-29). After the classroom observation, the conferencer analyzes the notes by re-reading them and categorizing the behaviors by putting the name of the skill, being exhibited by the teacher, in the margin. You may have an agreed-upon conference topic (a skill area) and you may be looking for specific instances where the teacher has used this particular skill. In addition, you may have labelled other skills in the margin.

In the Teacher Effectiveness Program role, I always left my notes with the teacher. (They had served their purpose once the conference was over). The teacher could then read the notes and see that I had noted many other skills as well, although these may not have been highlighted during the conference. Also, the teacher realized I was not taking anything away when I left the school (which helped to build up trust). The only kinds of records we kept were a list of the skills that had been our conference topics, so we would not cover the same ones twice (except by choice).

Your purpose in visiting a teacher may be rather different and you may want to use the classroom observational notes, plus any notes taken during the conference, in order to write a follow up report. Perhaps you plan to retain the observational notes in the teacher's file. Hopefully, the teacher would be given a xeroxed copy to keep. These are arrangements you and the teacher should agree upon. At any rate, anecdotal records provide descriptive data and once you speed up your handwriting you will improve your note taking skills. An example of handwritten (and labelled) anecdotal notes is provided on page 1-29.

Other Methods of Data Collection

The growing popularity of ethnographic techniques in educational research has increased the confidence in qualitative data collection techniques that seek to explain "what is" so all aspects of a situation are taken into account. The basic premise is that behavior is influenced by the setting, physical factors, and the convictions of the participants. Not all observed events can be explained and they need to be supplemented by holding interviews with teacher and students. The teacher's thoughts must be probed if the expectations and beliefs in operation in the classroom are to be known.

CLASSROOM ACTIVITY DESCRIPTION (C.A.D.)

Time When	**WHO**	**WHERE**	**WHAT**

Similar format used in Project Quest, MacKay, 1979.

ANECDOTAL NOTES	Margin left for labelling ↓
Heather is hearing rade 2 spellings at her disk - Grade 3: are working on a workbook exercise - - -	
(fault) "Um hum, hawk" (h-a-w-k) "good, and story s-t-o-r-y Good - got them all."	positive feedback (FB)
(whats a suffix?) "an ending. Prefix is a beginning, a suffix is an ending.	
Do the rest - Good you'll get them all off today." (Question - Yes. Watch where you're going)	support
Teacher looks up and around.	awareness
"Chris if you sit down the right way it's much easier to get finished. Lonnie, let's get one booklet done today at least."	minimal verbal ← ↙
"Okay, longer." (l-on-g-er) "good. Oh great, Terry. Look at that! Terry finally got one whole side of her bone clean. That's great. - - was having trouble .. working hard. Probably one of the hardest working ones"	praise ↓
(To Charlie) "The mouse was eating cheese. Good you can spell that, Charlie!"	praise
T. looks around as she listens to next st.	awareness
"You got it. That's a silly mistake for you Mandy. Oh boy". She erases it off. "You take these back Mandy."	(posFB)
"Let's do these three, hurt" (hurt) "good, sir" (sur) "sir, ir, ir ( ) good, turn" (ture) "let's listen to the ending sound." (turn)	Wrong answer - hint ~ question
"Right, remember to say the sounds to yourself before you say the letters. OK. Well let me erase these ones first. Sure" (sure) "good"	reminder
Teacher looks around. "Jeffrey can we get one booklet finished today. Thankyou"	awareness minimal verbal
T(?) "I know it is, Michael. Not much of a test on that one, is it?"	

Audio taping, video taping and taking photos are three other methods of gathering information in the classroom.

It is through a variety of data collection techniques that the supervisor will be able to understand the demands of the teaching situation more fully. The observer is then in a more defensible position to judge the quality of the teaching performance within that setting. If an appeal results from an evaluation report, the observer finds himself in the position of having to prove that fair and considerate procedures were used, and hence our concern for using a comprehensive and defensible approach.

Good, (1980) maintains that difficulties experienced with observational instruments are due to the (too) casual use of them without fully understanding the purpose or limitations of the instruments. Sometimes a popular instrument, used to advantage in many situations, gets adopted unchanged by a district and the ends are made to suit the means.

Medley predicts that although observational instruments were initially designed for research, a major impact will be felt through their use in the supervision of classroom teaching. They can be used to increase teacher awareness of behavior and to measure subsequent changes in teacher behavior. As such, they are valuable tools for the supervision of teaching.

OBSERVER BIAS

All of us have certain strong opinions and preferences that constitute our own particular brand of charm. When our own strong views make us intolerant and unaware of the views of others, our bias can be said to be interfering with our ability to remain objective (and to conduct a fair evaluation). As observers we will see a great many different instructional approaches that we might never choose to use personally but which are equally effective alternatives. Remaining objective and flexible enough to identify the merits of performance is one of the critical observer/evaluator behaviors.

Biases can lead us to interpret things immediately and to jump to (premature) conclusions instead of seeing, describing, analyzing and then forming an opinion or making a judgment. If three classroom observers all have different priorities for teacher behavior each will "assign the teacher a different task" and each will notice different behaviors as a result. If you as an observer like well-managed, highly structured classrooms you will react more positively to the teacher who displays structure (maybe even too much structure) while your partner observer has a high tolerance for noise, flexibility and ambiguity and gives credit to some teacher behaviors which you (and the students) find dysfunctional.

Having an awareness of one's biases tends to reduce their potential influence on our judgment. A useful way to discover these is by working through coding tasks and evaluation ratings with your peers. You will soon discover points of disagreement. Having ruled out visual or auditory mistakes (by re-playing a video or discussing the teacher event) the disagreement might be attributable to a biased viewpoint. If you have a tendency to rate specific teaching behaviors highly or you find yourself differing from colleagues a great deal on certain ratings, you may need to counter-balance your usual rating with a less harsh/favorable one.

Marston and Clements (1979) developed a 40 item instrument which asks you to indicate your level of personal agreement with belief statements about teaching. The complete instrument appears in the Appendix at the end of this chapter. Also included are the scores of nine coders who collected data for various studies conducted by the Centre for Research in Teaching. Through training, practice, and data collecting experience these coders had achieved and maintained high levels of reliability but, as you can see, they privately held differing opinions concerning various statements on Marston and Clements' instrument. They were aware of their own biases and discussed them, thereby minimizing their influence in their coding work. Notice, for example, the scores on items 18, 29, and 32. (Discipline, Teaching is inborn, Teachers should not expect pupils to like them). Take the test yourself and record your scores. You will probably wish to compare them with those of the experienced coders.

It is wise to acknowledge your own areas of bias and find out how others feel (and why) about the same items. Being aware of your own biases is the key to controlling their influence on your ability to be as objective and fair as possible.

REPORT WRITING

Before settling down to write a performance appraisal report, the observer should have spent sufficient time in the teacher's classroom observing in a variety of contexts. Manatt (1982: 31) recommends that several repetitions of formative reports should be used as the basis for the summative report. In these the focus could have been on classroom management, effective teaching behaviors, or interpersonal skills, for example.

An elementary teacher teaches a great range of subject areas and in addition to observing Language Arts, Math, Science, and Social Studies the observer should also have watched lessons in Physical Education, Music, Art, or special group project work. If a swap has been made with another teacher, watch the teacher (who is being evaluated) work with a different group of students. One can easily see why experts recommend a "minimum of ten classroom visits" before one reaches the report-writing stage. Junior-High and Senior-High teachers may be responsible for fewer subject areas but they meet with many different classes. The ways in which the teacher interacts with all students in his or her charge should be observed and noted. In the end, what you have observed should represent the full range of teaching activities and contexts pertinent to the teacher's assignment.

Data Base

The kinds of data the observer has gathered should be of different types so varied aspects of performance can be examined. It is wise to gather descriptive, low inference data during observations and to use this to reach judgments later on when all data have been reviewed and aggregated to reflect the most salient aspects of the teacher's performance. Manatt (1985: 19) suggests that all data used to substantiate the summative evaluation report should be maintained in a single folder. Items to be included in this folder would be: informal observation reports, formal observation reports with observational notes attached, work samples such as course outlines, lesson plans, job improvement targets (JITS), handouts, study guides, student marks distribution, and observer's notations. As the observer, you should keep a personal log diary of every activity pertaining to each teacher's evaluation sequence that year. The log functions as an official business record in which you enter all written and oral communication, and formal and informal observations. In this way, you build a complete record of the observational process. Manatt reminds us not to forget to record the good things too.

Considerable time spent gathering the information and the development of a wide data base allows the observer to be more confident about the statements made in a final report because more factual, descriptive data may be provided (on demand) and the observer will have to rely less on inferential deduction. This data base, kept in a file, will serve you well in cases where your evaluation is challenged.

Fact Versus Inference

In writing final reports it is advisable to include as much factual description as possible. This allows the reader to develop an appreciation of the teaching context and of the prevalent teaching behaviors observed. It also permits the reader to draw his own inferences about how appropriate and effective these teaching behaviors were. Basically, a factual statement is a non-evaluative report of observed behavior. Statements of inference contain an element of judgment. As evaluators we are being asked to make a judgment concerning the adequacy of the observed teaching performance. Before reaching the "bottom line", however, a report should contain information about many aspects of the teacher's work and this information should be presented in a straight-forward, factual (and brief, if possible) way. An indication that this description is based on a comprehensive set of observation data lends credibility to the report and shows that the observer is concerned with representing the teacher fairly.

It is inadvertently easy to insert inferential statements into the body of a "factually descriptive" report and the observer must guard against this tendency. Examine each statement carefully to see that no departure from pure description has been made. As a test-in-transit, analyze the following statements, typical of those in a summative report, and decide which of these exceed description and color the reader's perception.

- During the question and answer session, 13 of the 15 answers came from students sitting at the front of the room.
- Ten students did not volunteer to answer at all.
- The teacher ignored disruptive behavior on three occasions.
- She lost control of the class.
- The teacher circulated around the room and spoke with students at the back table five times.
- The teacher displayed enthusiasm 60% of the time.
- The teacher only asked the bright students to do the written exercise.
- The teacher had good/bad classroom control.

Gephart and Ingle (1985: 108) state that we need to consistently differentiate between data and judgments; "Your transition from A to B took too long" versus "Your transition from A to B took four minutes during which you repeated instructions three times." They caution that the judgment record can be substantiated only if there is one right and wrong way to teach, but research tells us "there is no one right way." Some people observe teaching and record judgments, perhaps making an inferential leap on the basis of incomplete data. Judgment records are akin to accusations and can engender defensive behavior on the part of teachers. Gephert and Ingle suggest that student growth data (based on pre and post tests) might be used when making judgments.

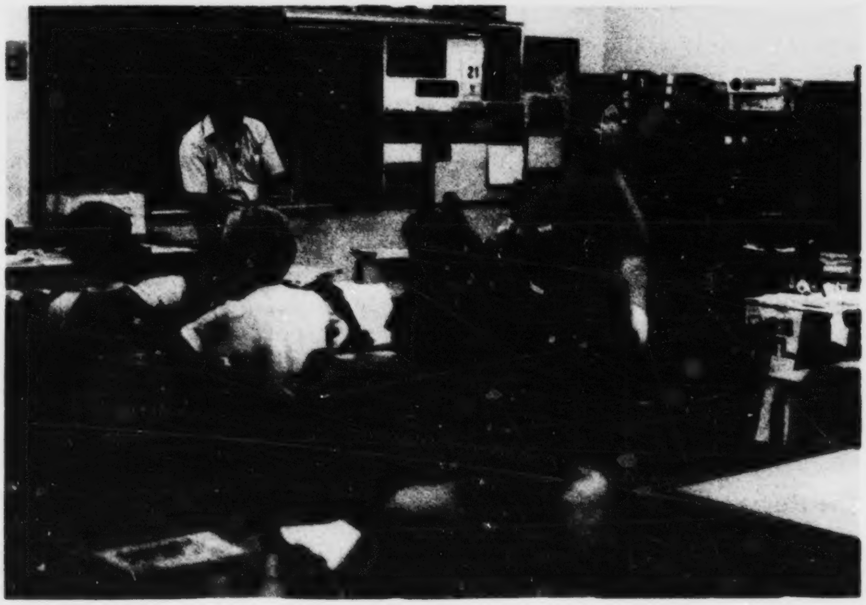
Sharing The Report With The Teacher

Performance appraisals are laden with emotional overtones for it is never easy to see one's shortcomings in print. If acknowledgement for work well done and effort expended is also included, and if the evaluator has taken care to represent the teaching assignment, and its demands in the report, the fairness inherent in the end result will be recognized and appreciated. Evaluation demands responsibility on the part of the observer and that portion of the teacher's performance appraisal that deals with in-classroom observation, data gathering, and assembling of information is our serious focus as we work through the six chapters contained in this kit.

In cases where the teaching performance is judged to be deficient, a clear statement should be included in the report (and delivered verbally to the teacher) outlining these concerns and suggesting ways in which help and assistance will be provided to the teacher. A timeline by which these improvements will be made should be specified in the report as well. The teacher should be advised, in this written report, that failure to improve these identified deficiencies could result in termination of contract. The teacher should be asked to sign this report acknowledging receipt of its contents.

The teacher should be given an opportunity to share and react to the information gleaned from a classroom visit. A post-observation conference should be an integral part of the supervisory process. Conferences can serve various purposes (and, to this end, four conference types are promoted in the Teaching Effectiveness Program). A successful conference requires conferencing skills and a clear sense of what is to be accomplished. In the case of a summative report the observer's report and conclusions should be shared with the teacher. In fact, some misunderstandings could have occurred and the conference allows the possibility of making adjustments before the final report is filed. If no changes will be made, the teacher should be allowed to express a reaction which becomes part of the final report.

As mentioned already, conferencing with the teacher is a required part of this process and we will soon turn our attention to the skills required for conducting productive conferences and to the different purposes for which conferences are held.



THE COMPETENT EVALUATOR

Manatt (1985: 6) points out that the evaluator of teaching must possess skills and expertise in:

a) observing in classrooms
b) conducting pre- and post-observation conferences with teachers
c) analyzing teaching performance and developing coaching and counselling strategies for feedback
d) analyzing lessons to determine whether the intended curriculum is being delivered
e) helping teachers to set job improvement targets and high expectations
f) monitoring and analyzing the achievement and needs of students.

In order to satisfy these expectations MacKay suggests that the evaluator of teaching should have the following attributes:

(1) The evaluator should be open-minded and should be willing to absorb a great deal of information about the teaching without jumping to premature conclusions about its quality. Manatt (1985: 22) recommends that the observer should be willing to look for discomforting evidence too, with an eye for improvement - which is the purpose of evaluation.

(2) The evaluator should have good vision and hearing and should be a naturally keen observer. One has to be sharp to see and hear all that happens in the classroom.

(3) The evaluator must identify and acknowledge his own weaknesses and shortcomings. He will thereby be able to reduce the influence of personal biases on his perception and decision making.

(4) The evaluator must have good interpersonal skills and must be able to set teachers at ease, reduce apprehension, hold positive assumptions about teachers, and motivate and encourage them. Holley reminds us that the evaluator must be able to confront problems and be willing to tell the teacher there are deficiencies in performance.

(5) The evaluator must possess good communication skills knowing when and how to ask probing questions and how to paraphrase in order to clarify misunderstandings. A knowledge of counselling techniques, particularly those based on neurolinguistic programming, are very useful. The evaluator must be an active listener and attempt to understand divergent points of view. He must allow the teacher to explain objectives or share perceptions about the lesson without interrupting. We tend to tell the teacher how things should be done from our perspective.

(6) The evaluator should be knowledgeable about curriculum content areas and about research on teaching, particularly the practical applications which are recommended in the form of "teacher should" statements. He must help teachers become familiar with research findings from the last decade so teachers will accept that evaluation criteria are valid and reasonable.

Manatt (1985: 13) states,

> One presumes that principals, department heads, and supervisors would be well-acquainted with the research on teaching and techniques of clinical supervision. In the U. S. such is not the case. There are states where all administrators have had recent training in such topics . . . in others, research on teaching is little known and clinical supervision is a vaguely understood phrase. Canada, incidentally, is generally ahead of the United States in this regard.
>
> The impact of certain individuals in doing basic research, viz., Thomas Good, Jere Brophy, Carolyn Evertson, Barak Rosenshine, David Berliner, Gary Borich, and the service of others to disseminate this new knowledge is remarkable. Trainers such as Madeline Hunter, Douglas Russell, Sue Wells, Joan Maxwell (all of UCLA), Ernest Stachowski from Long Beach, California; Erline Minton from Orange, California; Thomas McGreal at the University of Illinois; Dale Bolton, University of Washington; Thomas Good at Missouri; Jerry Bellon at the University of Tenessee; and Shirley Stow and James Sweeney, my colleagues at Iowa State University, all have worked across the United States. Nonetheless, a quick show of hands at most teacher evaluation conferences will reveal almost no one has much formal training in clinical supervision, and the knowledge of elements of effective instruction is scant.

(7) The evaluator should be conversant with a wide range of instrumentation for data collection and must be able to either select (or tailor-make) observational instruments which would suit both the circumstances and the classroom context.

(8) The evaluator must be clear about the purpose for evaluating and make sure that the stated purpose is the same as the operational purpose.

(9) The evaluator must have a knowledge of the legal requirements of observation and evaluation so that natural justice will be properly administered. He must know how to work with the marginal teacher (Manatt 1985: 31) and how to provide intensive assistance designed to remediate identified problems. If he is not an expert in the problem area he should assemble a team which can provide that assistance. "The knowledge that there is a separate routine for the subpar performer has a great motivating power and also tends to reassure the teacher who is performing well." The rights of both parties must be protected. Manatt contends that if we can evaluate we can terminate and, at that point, certain procedures must be followed closely and carefully.

(10) Above all, the evaluator must know how to plan and conduct conferences with teachers.

CONFERENCING

One of the keys to improved teaching performance is productive conferencing. In this section we will explore some of the preconditions for holding a conference and examine several different conference types.

Pre-Observation Conference

There is some disagreement among evaluators whether pre-observation conferences need to be held. The traditional clinical supervision cycle demands one but the realities of time pressures sometimes preclude anything but a quick conversation in the hallway. It seems clear that the advantages of holding a pre-observation conference with the teacher would include finding out:

- what the objectives of the lesson are,
- what the students are like,
- where they are in the course,
- what the teacher would like feedback on.

In addition, during the pre-observation conference agreements can be reached concerning the topic of discussion after the observation.

The Observation

Briefly, here are a few tips for sitting in classrooms gathering data:

- Decide where to sit and have a chair ready for you. You may want to sit facing the students so you can read their facial expressions. Perhaps the side of the room, rather than the back, will afford you a good view of both the teacher and the students.
- Be unobtrusive. Arrive early and blend in with the furniture as students arrive.
- Avoid eye contact with students.
- Avoid shuffling papers, dropping your clipboard, loud gasping, etc.
- Stay for the whole lesson (which should be a teaching segment with a beginning, middle, and end) or for longer if you can.
- Gather data frantically. You will be extremely busy and will probably develop writer's cramp if you are taking anecdotal notes. (I always did, but then I tried - fairly successfully - to take verbatim notes.) Learn to write quickly while you are watching with your head up. You will not see anything if your head is down watching your page. This may be a skill area in need of development!

- Then leave and find a quiet spot to examine and analyze your data and prepare for the conference.

Analyzing Data

If you have been observing for a half hour or more and have gathered notes or tick marks, plus some general impressions, I estimate that it would take you a good 20 minutes or more to plan the simplest conference. The more time you spend planning the conference or drafting the report the more effect your work will have on teaching performance. First, you must decide on a focus for the conference - if the topic has not already been set. The most usual problem is narrowing down the focus. Look for evidence that skills are in place in the topic area which you will highlight for the teacher. Organize and sequence your comments so the conference will flow smoothly. For example, in the case of anecdotal notes focusing on "accountability", you would search for all instances where the teacher has held students responsible for learning.

Statement: "First thing tomorrow morning, I will ask you for the five reasons why . . ."

Action: Teacher used wait time (at least 5 seconds) before picking one student to answer.

Look for places where something could have been said or done. Then decide how many of these you will use as examples. Again, this depends on the time you are able to spend in the conference and on its purpose.

Several elements will be considered next - the first of which is providing feedback to teachers.

Feedback

Our purpose in observing and then conferencing with a teacher is to act as a mirror of behavior for him. This will enable the teacher to examine his own effectiveness and to develop a relationship wherein both partners can learn more about teaching. With our assistance, the teacher will examine his own performance and determine alternate ways of delivering instruction. If properly skilled, you will allow the teacher to discover opportunities for growth. Because he has identified these potential areas for improvement and is committed to refining skills, changes (even with the excellent teacher) will occur. If you overwhelm the teacher with too much feedback, by telling him what is wrong and how to fix it, you will have alienated the teacher and wasted a chance to participate as colleagues in the improvement of teaching performance. Be aware of the powerful effect of negative feedback. It is difficult to accept criticism even if it is carefully sandwiched between supportive statements.

Whether you are providing feedback to a young fisherman, golfer, or an experienced classroom teacher, the main objective is to adjust actions to match the needs of the situation. Your feedback should support and encourage, while helping to identify any gaps between desired and actual results, and should coach the teacher to implement the skill more effectively.

In order to be of greatest value, feedback should be specific. It should be provided as soon as possible, once a suitable location has been found, and should focus on observable and alterable variables. The supervisor must be sensitive to both the cognitive level and the readiness level of the teacher. Apprehension will give way to trust, curiosity, and enthusiasm if you use certain conferencing methods and provide support and encouragement as you move through the conferencing process.

General Tips For Holding a Conference

These suggestions for conferencing have been distilled from Sweeney and other sources:

- Plan to spend sufficient time (average 40 minutes) debriefing the lesson and discussing possible courses of action with the teacher. (Don't look at your watch.) This should happen within 24 hours of viewing the lesson. The sooner the better.

- Find a location away from your office, perhaps in the teacher's classroom. Avoid interruptions such as phone calls and heads popping around corners during this time. This is too important to be interrupted.

- Have regard for the psychological context. Don't put a desk between you. Sit at the corner of a table or side by side so you can maintain eye contact and share your notes and data.

- Review the reasons for holding the conference and outline the format and sequence you intend to follow during the conference.

- Stick to agreed-upon topics. There should be no surprises or sudden departures from the planned agenda.

- Sharpen your own communication skills so that you know how to ask probing questions and how to paraphrase understandings. Borrow techniques from counselling and from neurolinguistic programming which are geared to this purpose. Establish a friendly, but business-like rapport based on mutual respect. You have important goals to set and accomplish together.

- Listen. This is one of the most difficult skill areas for us to master. You have to drastically limit your own talking and try to understand the teacher's perceptions and intentions if you are going to enjoy a productive working relationship.

- Keep the conference on task. You have goals to accomplish. Summarize your understandings and agreements as you end the conference. Depending on the situation, you may wish to keep a written record of the conference, signed by the teacher, or you may develop a report based on the whole observation and conference cycle you have just completed. If these cycles are held more informally and frequently you may not wish to document the process to the same extent.

CONFERENCE TYPES

Conferencing is considered to be the key to improved teaching performance. Through self reflection and through assistance provided by you, the skilled observer/conferencer, the teacher should soon begin to value observation and conferencing as a way of adding a whole new series of positive challenges to the job. Teachers almost universally want to improve their ability to enable students to learn and they will incorporate changes and refinements which will assist them to do this.

Hunter distinguishes between instructional conferences which are used to promote teacher growth (as in the A, B, C, and D conferences described next) and evaluative conferences which are used to assess teacher performance.

She outlines six conference types, four of which we use extensively in the Teacher Effectiveness Program, and the writer can speak directly of their utility. Each of the four has a slightly different intent and, as such, requires specific behaviors of the observer/conferencer. Incidentally, we teach these conferencing procedures to both our teacher and administrator participants as part of the routine curriculum in the program.

The belief underlying this conferencing process is that teaching is a performance behavior and can best be improved through analysis of that behavior.

The A Conference

The basic intent of the "A" conference is to identify and label the teacher's effective behaviors, giving a rationale for their effectiveness. Thus, the teacher knows what he did and said that was effective and why it worked. In the future, he can deliberately decide to include that skill more frequently in his teaching. Most teachers work intuitively not realizing exactly why things work well. Through the labelling of skills, a common vocabulary about the "technology" of teaching is developed. This enables the teacher and the observer to discuss the skill and to raise the use of the skill to a more conscious level.

The "A" conference is also an integral part of the "B", "C", and "D" conferences, as used in The Edmonton Public Schools Teacher Effectiveness Program. The format and sequence of these conference types have been derived from the work of Madeline Hunter and other sources.

When you are actually conferencing, it should sound like a conversation but the conferencer must be including the component parts of the conference. At first, when you are acquiring these particular conferencing skills and working through the phases and deliberately structuring your statements it may sound a little artificial and stilted. With practice you will soon find it becomes a natural progression through all the steps.

Introduction - Setting the Atmosphere. The first step involves setting the teacher at ease. The sequence suggested is:

> Greeting - plus a "Thank you for giving me the opportunity of practising my observation and conferencing skills."

> Pleasant Feeling Tone - These are comments which set the teacher at ease - perhaps an acknowledgement of a special occasion or a complimentary comment about something in the classroom, like the art work.
>
> Overview - This is an explanation of the sequence of events that will occur during the conference. It also includes the objective and purpose for holding the conference.

The introduction is followed by a "transitional" statement which moves the conference into the next phase: e.g., "Now that we've outlined the format we're going to use today, let's begin."

Phase I: Complete the Diagnosis - This is the teacher's opportunity to recall and reflect upon the lesson.

> I'd like you to share your impressions of how your lesson went. Perhaps identify the things you were particularly pleased with (* or any weaknesses you noted).

* If there is a chance that the teacher will overdwell on faults, leave this out. Make sure you can return to a positive focus if you do decide to ask about weaknesses.

During this phase you must listen carefully. You will be able to verify what you have observed. By allowing the teacher to comment before you do, you provide for professional dignity. You may detect subtle concerns which you might want to pick up on later. (If an overwhelming concern is being expressed, you may actually decide to ditch your original conference plan and hold a "C" conference instead on the topic of concern which the teacher has raised.) By asking for the teacher's perceptions before you provide feedback, you will probably get additional information which will help you complete the diagnosis (analysis) of the lesson you have observed. Depending on whether you are holding a "B", "C", or "D" conference you might ask the teacher to expand on __________. By doing this, you will be able to refer back to the teacher's comments when you reach Phase 3. Be careful not to make the teacher defensive or uncomfortable with this probing.

After the teacher has finished, you will probably have to pose a question designed to narrow the teacher's focus to the particular teaching skill to be highlighted in the conference:

> Thinking specifically of __________, were you conscious of using any strategy to do this?
>
> Can you think of any instances where __________? What did you use to __________?
>
> You needed to __________ and do __________. How do you feel you __________? Could you sense whether __________?

This prepares the teacher for listening to specific feedback about the use of this skill. Statements such as

> Thank you for telling me about your perceptions of your lesson and about the use of __________. Now I'd like to provide you with

> examples of how you used the skill effectively and what you did and said.
>
> Let me highlight some of the things you did effectively,

would serve as transitional statements to the next section of the conference.

Phase II: Encouragement. The first step is to name and define the skill which will be the focus of attention for this segment of the conference. Tell what the skill is, when we use it, and why we use it. Then provide very specific feedback to the teacher.

It is desirable to share your notes with the teacher. As you mention specific instances you can be pointing to the parts in your notes where this is written. Try to provide verbatim quotes back to the teacher. (Hence, your notetaking has to be both speedy and accurate.)

After you have highlighted sufficient examples of the teacher's use of the skill, summarize by confirming that the teacher has this skill in place and uses it to good advantage. Recommend that the teacher continue to use the skill, reiterating some of the reasons why it has impact on student learning. Hunter maintains that the function of our feedback here is to review the things that went well. This raises the use of the skills to a conscious level.

In order to move to the last phase, Closure, which is a teacher summary, you could say something like:

> Please summarize for me some of your strengths that we discussed in today's conference.
>
> Now review for me the skill we have been talking about and why we should use it.
>
> For the final part of our conference, please recap the things you have learned in our conference today.

When I was a Teacher Effectiveness Consultant, some of the conferencers I was coaching adopted a fairly formal style. One even used a mimeographed sheet containing the structuring and transitional comments which were not likely to change from conference to conference. Blanks were left for the particular skill which was the focus for the day. I personally felt her conferences were too formal and I much preferred watching conferences where all the parts were included but the conversation flowed more naturally. We instructed participants to follow the structure of the conference rigidly at first until they became very familiar with the segments. Then they could incorporate these into their more personal conferencing style. There is an art in setting a friendly climate, conversing normally, and following the conference format all at the same time.

The basic intent of an "A" conference, then, is to provide support and encouragement for the teacher who is using a particular skill or skills effectively. An "A" conference usually is incorporated as the first part of a "B", "C", or "D" conference. One simply moves from an abbreviated "A" conference into the next conference which has a slightly different intent. See the Conference planning guide, page 1-44.

The "B" Conference

The main purpose of the "B" conference is to expand the teacher's repertoire of skills so he will have more options at his fingertips and will not be limited to those versions of the skills most frequently used. The first two phases of this conference are borrowed directly from the "A" conference. In the initial overview section, however, the teacher is informed that both you and he will generate alternatives later on in the "B" portion of the conference. The skill highlighted in the "A" conference is usually the same one expanded upon in the "B" conference.

The transitional statement which moves you into Phase III (the "B" segment) is sometimes called a "freeing" statement. Several examples follow:

> We're not looking for better ways to use this skill, just other ways.
>
> Let's brainstorm ways we could also use this skill.
>
> I want to generate alternatives on these skills you already possess with the objective of increasing your repertoire and teaching satisfaction. What other ways have you used this skill in the past? Together we'll develop a list of other approaches. This is helpful to me too because I can share ideas we generate with other teachers.

As you can see, the teacher must be reassured that you are not suggesting that he does not have the skill in place already. You are merely being inventive and are planning other ways it could be employed. This set, or motivation for engaging in the activity, is explained to the teacher. The objective, then, is for both parties to suggest other ways the skill could be used. One way is to re-examine today's lesson and decide where alternate methods could have been used. The more usual plan is to determine alternate ways to use the skill in an upcoming lesson.

You, the observer, must play an active part here in generating alternatives. Your credibility is at stake. Brainstorm all ideas you both have, withholding any evaluation of them until later. Then go back and re-examine each, developing the ones that have the most promise. After several workable alternatives have been fully developed, check each one to determine whether the criteria for the skill have been met. Are they all true examples?

Then, ask the teacher to pick the most attractive alternative and to make a commitment to use it. If possible, try to be there to watch. If not, be sure to ask the teacher how it worked during your next meeting.

The last phase, "Closure: Evaluation", begins with you asking the teacher to summarize what has been discussed and decided. Also ask the teacher to explain in what way he has found the conference beneficial and to restate his plans to use the ideas in the future.

CONFERENCE PLANNING GUIDE*

TYPE A

INTRODUCTION: SETTING THE ATMOSPHERE

- GREETING
- PLEASANT FEELING TONE
- OVERVIEW Sequence of events
  Objective and purpose

TRANSITIONAL STATEMENT

PHASE I: COMPLETE THE DIAGNOSIS

- TEACHER'S PERCEPTIONS (Narrow Focus)

TRANSITIONAL STATEMENT

PHASE II: ENCOURAGEMENT

- SKILL definition, what, when, why
- SPECIFIC EXAMPLES LABELLED
- RECOMMENDATION
- RATIONALE

TRANSITIONAL STATEMENT

CLOSURE: focus on ESSENTIAL LEARNINGS

- SUMMARY
- INTENT

TYPE B

INTRODUCTION: SETTING THE ATMOSPHERE

- SAME AS TYPE A

TRANSITIONAL STATEMENT

PHASE I: COMPLETE THE DIAGNOSIS

- SAME AS TYPE A

TRANSITIONAL STATEMENT

PHASE II: ENCOURAGEMENT

- SAME AS TYPE A

TRANSITIONAL STATEMENT (freeing statement)

PHASE III: GENERATING ALTERNATIVES

- Objective and purpose for the brainstorming process
- Generate specific alternative examples
- Check for critical attributes
- Teacher chooses

TRANSITIONAL STATEMENT

CLOSURE: EVALUATION

- SUMMARY OF LEARNING AND INTENT
- NEXT STEPS

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* Used in the Edmonton Teacher Effectiveness Program.

The "C" Conference

The intent of a "C" conference is to encourage the teacher to identify a skill for practice and improvement and to help develop strategies to reduce and eliminate future unsatisfactory outcomes. In collaboration with the observer, alternate ideas can be generated. The observer does not introduce negative comments. The teacher expresses dissatisfaction with some skill area.

The "C" conference should flow out of an "A" conference wherein reinforcement on the use of a different skill has been provided by the observer. Specific feedback and sharing of verbatim examples or descriptions of what the teacher did and said have been shared with the teacher. The "C" portion of the conference begins when the observer invites the teacher to choose an area he would like to work on. The structure would look like this:

Phase III: Generate Alternatives

Objective and Purpose for the Brainstorming Process

Generate an Objective for a Future Lesson

Clarify that Objective

Generate Specific Alternative Examples

Check for Critical Attributes - Make sure your generated examples satisfy the criteria of the skill

Teacher Chooses

Transitional Statement

Closure: Summary

Teacher summarizes the Phase III portion of the conference.

The "C" conference will afford practice in a skill that the teacher is concerned about - or wishes to extend. Listen carefully to the teacher's concern. Allow the teacher to explain it without interrupting (which we are prone to do). Together, clarify the objective of working on a particular skill and determining ways to use it more effectively.

This "C" type of conference keeps you, the observer, on your toes because you won't know which skill area the teacher will choose. If you have taken anecdotal/verbatim notes you will have collected a lot of extra data not labelled and used in the "A" portion of the conference. Hopefully, you will have gathered some data which may show an instance or two where the observer has displayed elements of the skill so you can, at least, reinforce a partial implementation of it. It is most gratifying to be able to pull such an example out of the hat and show the teacher the place in your notes where it was recorded! (Having writer's cramp is a small price to pay.)

The teacher initially may rely more on you to get the brainstorming started. This means that you must have a good understanding of many skills and their attributes and must be able to think on your feet. Instructional conferencing is not a spectator sport, as Hunter reminds us. Once you suggest a few ideas the teacher may be better able to participate too. When you have conferenced a lot with many teachers you will have a wealth of suggestions tucked away Share suggestions from other teachers that have worked in other situations. The teacher should leave the conference with a new idea or two to try.

Check to see that the ideas you develop satisfy the attributes of the skill. Then ask the teacher to commit himself to using a particular one in the near future. Make sure to ask about it - or, if possible, come in to see it.

In closing the conference, ask the teacher to summarize the skill, its attributes, and the commitment he has made. Also ask him to describe how the conference was of benefit to him. (If you can get feedback for yourself ask the teacher to suggest ways you could improve the conference so it would be of even greater benefit to him.)

The "D" Conference

In the "D" conference, the observer labels and identifies those less effective aspects of teaching not evident to the teacher and helps the teacher develop alternate procedures which have potential for effectiveness. This conference demands that the conferencer exercise tact and diplomacy. It should be viewed as a chance to fine-tune or (re)teach a skill to the teacher. It may be a skill the teacher does not know how to use. The teacher is not able to see and consider everything. This is the major value of having an observer in the classroom. It is of crucial importance that trust and rapport has been built up during previous conferences. The observer must identify opportunities to use the skill in the lesson and not dwell on what the teacher did or did not do instead.

> Here is a place where you could use the skill of __________ in order to __________. Let me describe the skill and some ways to implement it.

In the Teacher Effectiveness Program we maintain a positive, supportive climate while pointing out the chance to expand the teacher's repertoire by adding in a skill not currently used. In Hunter's "D" conference, the observer may focus in a bit more on what went wrong and why, before working on ways to improve the situation. As she says, "The D conference is used with that small number of teachers who have retired on the job." Our emphasis is less negative and we use "D" conferences routinely with good teachers to improve performance.

You can see why this type of conference demands sensitivity on your part. If conducted successfully, the teacher should not have experienced embarrassment, should have accepted the ideas, and should have helped to develop them.

Again, an "A" conference precedes the "D" conference. In the introduction and overview (Phase I), you will have informed the teacher that you will be conducting a

"D" conference. There should be no surprises. If you have listened carefully during the teacher's input in Phase I of the "A" conference section, and if you have posed a carefully worded question during this input, you may have already elicited some information from the teacher concerning the skill area you wish to work on. If so, you can hook into those comments as you begin Phase III of the "D" conference; Teach the Teacher. The structure looks like this:

Phase III - Teach the Teacher

- Set/Cross Reference to Phase I - develop a readiness to work on refining this skill.
- Sharing Objective and Purpose with the Teacher (Why have you included this section in the conference? . . .to improve instruction, to extend teaching skills).
- Modelling and Explanation of the Skill
  - what, when, why
- Guided Practice/Coaching
- Transitional Statement

Closure: Summary

Teacher summarizes for Phase III

- What was learned
- Commitment to implement the skill

The "E" Conference

Hunter suggests helping the already excellent teacher to expand his professional growth. Perhaps he can be encouraged to demonstrate strategies for other teachers or to share his expertise in another way. Ways of accomplishing this are explored in the "E" conference.

The Evaluative Conference

We have experienced this kind of conference all too often as either the recipient or the conferencer. It can be a rather distasteful experience. As opposed to the preceding instructional conference types (Hunter) which are for growth and development, this conference shares a summative judgment with the teacher. Such judgments are required from time to time and answer the questions, "How well is this teacher performing?" and "Does this performance satisfy requirements in our school district?" The contents of the report should be revealed to the teacher during this conference. Adjustments to the report may be made after exchanging information or the teacher may simply react to the report by adding his comments to it. The teacher must be made aware of any perceived problems and every effort must be taken to provide assistance in rectifying the situation by a specified date. If there is any chance that failure to do so would result in the termination of the teacher's contract, he should be advised of the gravity of the situation both verbally and in the written report.

Hopefully, one's evaluation conference should highlight the skill areas where one is performing effectively as well as identifying areas in need of improvement. This provides the basis for setting annual job improvement targets (JITS/Manatt); goals towards which the teacher works during the year. On an ongoing basis, this process identifies the professional development needs of the teacher while encouraging and supporting his teaching performance. The evaluation conference should be a summation of what has resulted from a series of instructional conferences conducted frequently throughout the year.

Conferencing With the Teacher in Difficulty

This can be a long and thankless process. After several observation and conferencing rounds confirm that the teacher is floundering badly, you must alert the teacher to the gravity of the situation verbally and in writing. There are many reasons why teachers experience difficulty. Some, thankfully, are temporary and with specific assistance with personal problems or with the implementation of more effective teaching skills, these problems can be solved with reasonable success.

Quite often the root of the problem is a complete lack of confidence and a feeling of failure. Your objective is to assist the teacher to get back on his feet. He feels overwhelmed and, with your guidance, he must see a way of systematically overcoming one problem at a time. The first challenge is a clarification of the problem area(s). You may only be reacting to symptoms. Refer private personal problems to those better equipped to help. You can help the teacher determine "where he is now and where he wants to be." It is then possible to identify the steps that must be taken to reach the desired state. The teacher must be clear about the outcomes he is pursuing when attempting to solve a collection of problems and must acknowledge the present state of affairs (and deficiencies therein) before any real progress will be made.

A documentation procedure is usually employed when a teacher is experiencing serious difficulties. Records should be kept of observations and conferences, conversations, and assistance provided by other personnel. After a reasonable period of time, and if insufficient progress has been made, termination proceedings will be initiated. The teacher should be advised of the legal assistance available and of the choices he has.

CHAPTER ONE VIDEOTAPES

Tape 1-1. Introductory Tape, Accession Number ____________

Dr. Laurie Mireau outlines the characteristics of the effective classroom observer and talks about the skill areas required for this task. Pointers on conferencing with teachers are also provided. (24 minutes).

Preliminary Activity

Before reading any further, humor me by selecting Chapter One, Test Tape, (Tape 1-2) and use your present knowledge and skills to write a brief summative report, based on this (approximately 18 minutes) visit to a classroom. Watch the tape, looking for and noting down teacher behaviors that, in your view, demonstrate the strengths (and weaknesses) of this teaching episode. Then, taking a few minutes, write a short report highlighting the important points you have observed. Do not discuss your findings with colleagues until this activity is finished. Your report, plus your working notes, should be collected by your group leader and sealed in an envelope for use later on or just filed, by you, in a safe place. At a much later time, when you have finished working through the exercises in the Kit, you will repeat this activity and compare the two sets of rough notes and the reports.

Some differences may (hopefully) be noted. Your interpretation may have changed or your emphasis may be on other aspects of teaching performance - or more data may have been gathered to support your original assessment. In this way you can decide which information has been of use to you and/or how you may expand your data base.

Tape 1-2, Test Tape - Heather Lynn. Grade 2/3, Language Arts, Accession Number ____________.

The class you will see is a grade 2 and 3 class. Grade 3 students are in their seats working on a workbook exercise on suffixes. The grade 2 students are correcting spelling mistakes and when they are sure they can spell the words correctly they come up to the teacher's desk and spell them for her.

VHS	
0000	Graphics
0019	Introduction and Overview of Test Tape
0057	s-w-i-m-m-i-n-g, f-a-u-l-t. I can't hear Jason, boys. Caleb, do you need some help with your spelling booklet?
0087	Charlie, come up here with your book. We can go through a sentence together.

0113	We will be working on this 'til 9:30.
0205	Terry finally has one whole side of her bone clean.
0325	Tanis, you're doing well. It's almost time to stop.
0375	We're ready to stop.
0405	By the time I count to 3 everyone should be back at their desks. Grade 2's, listen first - Ears open. 10 empty fingers . . . Grade 3's, to the back table.
0459	Credits.

Tape 1-3, The "B" Conference, Accession Number ___________.

Liz Harrison - Consultant
Heather Lynn - Grade 2/3 teacher
(34 minutes)

Liz observed Heather's lesson which we have included in the kit as Tape 6-10.

Read the description of both an "A" and "B" conference before watching the tape. Then view this videotape and identify the component parts of both conferences as you listen in on their discussion.

Tape 1-4, The "C" Conference, Accession Number ___________

Liz Harrison - Consultant
Merv Tuplin - Junior High School teacher
(35 minutes)

Liz gives Merv feedback on his Grade 7 math lesson which is included in this kit as Tape 6-9.

After completing an "A" conference, Liz moves into a "C" conference by inviting Merv to select a skill area he wants to refine. Review the format and purpose of both the "A" conference and the "C" conference. Then watch this tape and identify the parts while you listen to their conversation.

Tape 1-5, Conferencing With the Teacher in Difficulty, Accession Number ___________. (52 minutes)

VHS

0000	Graphics.
0026	Introduction and overview

Peter and Sue role play three interviews on this tape. They utilize communication techniques derived from neurolinguistic programming - specifically from the work of John Grinder, Richard Bandler and Robert Diltz. The focus is kept on developing outcomes, and questioning methods used in the tape keep the teacher focused on what has to happen. The book, Influencing with Integrity, by Genie Laborde, 1984 provides an overview of this particular process.

0091 The first interview occurs sometime during mid-year. The teacher is overwhelmed and upset and the principal has a number of concerns but is not sure where to start. The principal begins to define some problem areas. The teacher blames the students and parents for her problems. By using certain techniques, Peter narrows the conversation to a particular teaching context where Sue is able to be specific about desired outcomes. This gives them a starting point to work towards together.

0279 In the debriefing, Peter and Sue explain the kinds of concerns supervisors have when initiating contact with a teacher who may be in difficulty. Certain kinds of discussions and ways of reflecting about the situation can lead to a useful exchange of ideas between the teacher and the principal and the setting of outcomes they can both try to attain. Peter and Sue pattern their conversation on the communication process known as neurolinguistic programming, or N.L.P. First, they have to outline some problem areas, identify some outcomes, and get agreement about the indicators or evidence of success. The focus on outcomes helps both parties to view the situation more objectively.

0289 The second interview on this tape takes place early in the fall of the next year. Peter reminds Sue of some of the problems experienced last year. He stresses that these problems must be solved. He pledges his assistance and that of outside consultants and alerts her to the fact that if she is not successful in overcoming her difficulties it could lead to termination of contract. Peter informs her that he will be closely documenting his supervision of her this year. Sue asks questions about the use of data he will collect and wants to know who will have access to this data.

0929 The third interview takes place six to eight months later, as the year is drawing to a close. Peter advises Sue that he has made a decision to terminate her contract based on her lack of success in improving her teaching during the year. He informs her that legal advice is available through the teachers' association and recommends that she seek some career counselling in order to determine what other job she might be interested in. She has the choice of appealing his decision or resigning her teaching position.

1028 Credits.

CHAPTER ONE APPENDIX

Used with permission from Drs. Marston and Clements and from Dr. Gene Hall, Director of the Research and Development Center for Teacher Education, The University of Texas at Austin, Texas.

- **BIAS TEST. (CODER ATTITUDE SCALE BY MARSTON AND CLEMENTS - R AND D REPORT #5068)**
- **SCORES ON BIAS TEST BY EXPERIENCED CODERS**

CODER ATTITUDE SCALE (CAS)

Paul Marston and R. Clements

1. Teachers should organize the class routine so that little time is lost in transition from one learning activity to another.

1	2	3	4	5
DISAGREE				AGREE

2. Effective teachers are consistent in their relationships with students.

1	2	3	4	5
DISAGREE				AGREE

3. Most of my teachers have been competent.

1	2	3	4	5
DISAGREE				AGREE

4. Difficult disciplinary problems are seldom the fault of the teacher.

1	2	3	4	5
DISAGREE				AGREE

5. Pupils can be very boring at times.

1	2	3	4	5
DISAGREE				AGREE

6. A good teacher recognizes and responds to contributions of students.

1 2 3 4 5

DISAGREE AGREE

7. Good teachers employ creative and imaginative approaches to teaching.

1 2 3 4 5

DISAGREE AGREE

8. Most pupils are not interested in learning.

1 2 3 4 5

DISAGREE AGREE

9. "Those who can do, those who can't teach", is a cliche that fits most elementary teachers.

1 2 3 4 5

DISAGREE AGREE

10. The whims and impulsive desires of children are usually worthy of attention.

1 2 3 4 5

DISAGREE AGREE

11. Good teachers pace their instruction to suit students' concentration and interest span.

1 2 3 4 5

DISAGREE AGREE

12. A good teacher maintains a neat personal appearance.

1 2 3 4 5

DISAGREE AGREE

13. Passing students to the next grade for social reasons is a good idea.

1 2 3 4 5

DISAGREE AGREE

14. Teachers should design lessons and units with clear, logical and sequential content.

1 2 3 4 5

DISAGREE AGREE

15. A teacher should be able to get along with almost any child.

1 2 3 4 5

DISAGREE AGREE

16. Children are not mature enough to make their own decisions.

1 2 3 4 5

DISAGREE AGREE

17. Teachers who utilize a variety of questioning strategies will have better results.

1 2 3 4 5

DISAGREE AGREE

18. Discipline in the modern school is not as strict as it should be.

1 2 3 4 5

DISAGREE AGREE

19. Children usually have a hard time following instructions.

1 2 3 4 5

DISAGREE AGREE

20. Teachers should communicate with students sympathetically, accurately an with understanding.

1 2 3 4 5

DISAGREE AGREE

21. One should not expect pupils to enjoy school.

1 2 3 4 5

DISAGREE AGREE

22. Effective teachers give careful attention to the physical condition and appearance of the classroom.

1 2 3 4 5

DISAGREE AGREE

23. Too many children nowadays are allowed to have their own way.

1 2 3 4 5

DISAGREE AGREE

24. Showing initiative and imagination is an important teacher characteristic.

1 2 3 4 5

DISAGREE AGREE

25. The teacher should not be expected to manage a child if his or her parents are unable to do so.

1 2 3 4 5

DISAGREE AGREE

26. Children will think for themselves if permitted.

1 2 3 4 5

DISAGREE AGREE

27. Grading is of value because of the competition element

1 2 3 4 5

DISAGREE AGREE

28. A teacher should involve all students in learning activities.

1 2 3 4 5

DISAGREE AGREE

29. You can't teach someone to teach -- it's an inborn quality.

1 2 3 4 5

DISAGREE AGREE

30. Practising positive reinforcement techniques is an important aspect of teaching.

1 2 3 4 5

DISAGREE AGREE

31. Children are unable to reason adequately.

1 2 3 4 5

DISAGREE AGREE

32. Teachers should not expect pupils to like them.

1 2 3 4 5

DISAGREE AGREE

33. An effective teacher prepares written lesson plans.

1 2 3 4 5

DISAGREE AGREE

34. Standards of work should vary with the pupil.

1 2 3 4 5

DISAGREE AGREE

35. Most pupils are considerate of their teachers.

1 2 3 4 5

DISAGREE AGREE

36. One cannot be a good teacher without having control over the classroom.

1 2 3 4 5

DISAGREE AGREE

37. Children usually will not think for themselves.

1 2 3 4 5

DISAGREE AGREE

38. A teacher must treat students impartially.

1 2 3 4 5

DISAGREE AGREE

39. An open classroom promotes learning.

1 2 3 4 5

DISAGREE AGREE

40. There is too much emphasis on grading.

1 2 3 4 5

DISAGREE AGREE

	CODER I.D.	ITEM NUMBER ON MARSTON AND CLEMENTS' INSTRUMENT																																							
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
1	01	5	5	4	2	2	5	5	1	3	3	5	4	2	5	3	2	5	5	1	5	1	5	4	5	2	4	4	5	1	5	1	4	5	5	4	5	1	5	2	4
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6	06	5	5	3	2	1	5	5	1	1	3	5	5	2	5	4	3	5	5	2	5	2	5	3	5	4	5	1	5	1	5	3	5	5	5	4	5	1	5	5	5
7	07	5	5	4	3	1	5	5	1	1	4	5	5	3	5	4	2	4	2	1	5	1	4	2	4	4	4	2	4	2	5	2	5	3	4	5	2	1	4	4	4
8	08	5	4	3	1	1	4	4	1	1	5	5	2	2	5	4	3	5	4	1	4	2	2	3	4	2	5	2	5	3	5	1	2	4	3	4	5	1	5	3	3
9	09	5	5	4	2	2	5	5	1	1	4	5	5	2	5	5	1	4	3	1	5	1	5	3	5	3	5	2	5	2	5	1	2	3	5	4	4	1	5	3	4
10																			↑											↑			↑								
11																																									
12																																									
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BIAS TEST RESULTS

Chapter Two

Classroom Management and Control Skills

CHAPTER TWO

CLASSROOM MANAGEMENT AND CONTROL SKILLS

(Teacher's Awareness, Concurrent Tasks Management, Classroom Problem Management, Feedback To Pupils, Task Oriented/Businesslike Orientation, Teacher Centered/Direct Instruction)

INTRODUCTION

The teaching skills highlighted in this chapter deal with classroom management and control. The particular skills included herein are only representative of the full range of classroom management techniques so the list is by no means exhaustive. Effective classroom control is well established as one global criterion to be used in the evaluation of teaching. One must "teach from order" and one who doesn't is soon identified as a teacher lacking effective management techniques. The importance of having strong classroom management skills can not be overstressed, for without them the (other) instructional skills a teacher possesses cannot be used to any advantage. Generally, the skills having to do with the presentation of information and monitoring student academic progress will be termed "Instructional" skills and will be examined in Chapter Three. There is much overlap between the two sets of skills, and distinctions made between them are somewhat artificial, but they allow us to isolate teacher behaviors for closer examination and discussion.

Purpose of Chapter Two

The main purposes of this chapter are:

- to examine selected classroom management skills in order to define them and give examples of their particular attributes and functions;

- to confirm and broaden the user's perceptions of the characteristics and utility of these important teaching skills;

- to afford practice in coding observational data by (a) using low inference checklists that record the existence of the behavior (or the sequence in which it occurs) by placing a tally mark within the appropriate category and by (b) using high inference rating scales that require a judgment about how well the behavior is employed by the teacher; and

- to encourage the flexibility (and the confidence) of the supervisor to pick and choose among the coding options available, so that behaviors suitable to the particular teaching context become the focus for observation. (It may be inappropriate to look for the same teaching behaviors you looked for in the neighboring teacher's classroom because factors like the preferred teaching style, the age of the students, or the subject being taught have to be taken into account.)

Format of Chapter Two

Descriptions of each criterion will be presented with specific examples (where possible) of what the observer might see or hear as evidence of its existence in the teacher's repertoire. These are suggestions and examples only and will not suffice for all grade levels. The translation of how it might or should look in particular situations is left to the supervisor's discretion. (Take courage, they must have hired us for some reason!) Where available, video clips of the behavior (exhibited during ongoing instruction) have been included. It is strongly suggested that you accompany your reading and reflecting with a lively discussion about all aspects of the particular teaching behavior. Other suitable examples of its existence can be generated in group discussions and saved for your future reference. There are many ways to skin the proverbial mule and, rest assured, your fellow professionals are waiting to pool information and ideas and to work together to improve the process of teacher evaluation in your district. The culminating activity is collecting data using instruments provided in Chapter Two to code information from the video tapes in Chapter Six. You will appreciate the instant replay feature here. This experience should be followed by a visit to a real classroom (preferably with a colleague who is busily honing data collection skills, too. Examine the discrepancies in your coding and try to reach consensus on your coding decisions). The grand finale would be to devise an instrument with a content and format suitable for your own purposes and to use it to gather data in the classroom for which it has been designed.

Additional Comments

The behaviors included in this chapter are considered by educational researchers to be used most prominently by effective teachers. The behaviors are not mutually exclusive nor are they sufficient in their own right to effect good classroom control. Instead, they should be viewed as parts of an interdependent set of skills that collectively enhance a teacher's classroom control and management ability. It is always dangerous to present one mini-behavior after another for one could form the wrong impression that teaching is atomistic instead of a complex, integrated process.

After you have observed for a variety of these behaviors it will become more possible (and defensible) to assign a global (high inference) rating of classroom control, based on the efficiency with which a variety of certain sub-skills are employed by the teacher. The more consideration given to many skills subsumed under the general heading, the more confident you can be about the accuracy, fairness, and objectivity of your global rating.

Preventative Skills

One set of classroom management skills is considered to be "preventative" for it requires that the teacher anticipate what may happen and take steps to reduce or eliminate this probability. If and when "problems" do materialize (some things you can count on) it is advantageous to have the majority of the class "on the teacher's side."

The teacher's purposeful (calculated) efforts to build support, trust, credibility, mutual respect and co-operation are anticipatory behaviors. This careful development of a positively cohesive classroom atmosphere pays off at times when an altercation does arise. The recalcitrant student gets sparse "allied support" from classmates who generally find the teacher to be a fair and likeable person.

The general pleasant tone set by the effective classroom teacher is characterized by:

- smiling
- eye contact - friendly - all-inclusive
- modeling politeness - "Please", "Thank you"
- pleasant voice
- use of student names
- moving through the crowd (physical presence of teacher is experienced by all students)
- businesslike, goal-oriented behavior.

This set of indicators is described as "Positive Feeling Tone" by Madeline Hunter (as opposed to "neutral" feeling tone or "negative" feeling tone) and is one of the easier classroom dimensions to assess. It is also one of the first skill areas selected for feedback when beginning a conferencing process with a teacher. It is a skill area in which most teachers are already demonstrating effective behaviors. Especially during the first few conferences it is reassuring for the teacher to receive feedback about a skill which he or she is using well.

- What level of psychological comfort do you perceive in the classroom?

- Are students eagerly volunteering to contribute answers?

- Are their answers graciously received by the teacher?

- Do student facial expressions attest to their interest in learning and their liking of the teacher?

The set of skills included under "Winning Over" (again from the Teacher Effectiveness Program) build on the Feeling Tone Component and are characterized by acts of teacher kindness and consideration and personal interest in each student. Over time, a student realizes that the teacher sees and values him as an individual. When an altercation does arise, the student may back down and give the teacher the benefit of the doubt. Examples of teacher behavior that win a student over do vary from one student to the next but may include:

- Praising effort expended and work well done.

- Recognizing individual talents through displays or opportunities provided for sharing ideas, demonstrations, or work with other students.

- Asking about the weekend/ball game/swim meet/camping trip.

- Expressing interest/approval about a new shirt/hairdo/set of felt pens.

- Acknowledging a birthday (maybe even sending a card to the child's home).

- Writing thank you notes (and sending them to the child's home) for any gifts received.

- Showing empathy and sensitivity to children's feelings and special needs.

- Finding ways to integrate meaningful examples from the child's life into math, science, etc. or using student names in worksheet questions.

* - Standing at the door to greet students individually as they enter the classroom instead of whining a perfunctory "Good morning" to all of them at the same time.

* This behavior of "meeting students at the door", is an example of one behavior that accomplishes many things:

- the student is greeted personally and made to feel welcome;

- the teacher is visible as students enter, thereby preventing potential student misbehavior;

- student is likely to put coat away, sharpen pencil, and get books ready if the teacher appears to be watching (accountability);

- activity in the hallway can be "monitored" by strategic positioning of the teacher in the doorway;

- overly excited/pokey/verbose students can be briefly acknowledged and "processed" through the doorway enroute to the cloakroom and desk (Time can be found later for "attention" to them).

The teacher who delays leaving the staffroom, getting a second cup of coffee, and enters the classroom after the students, can expect to find some students in seats and waiting, some not ready, and some actively involved in a disturbance. This puts the teacher in the position of having to settle misbehavior before beginning the class. The Feeling Tone will undoubtedly suffer as the students are asked, "How many times have I told you ...?" This situation, in most cases, is avoidable and the alternative has much to recommend it.

Winning students over should not be seen as a manipulative ploy but rather one that keeps a positive emphasis (one tends to see what one looks for) and which encourages the students to co-operate with the teacher. The teacher should try to concentrate on positive student qualities. As an insurance policy it pays good dividends - particularly when the chips are down and difficult situations arise. If the teacher has not been successful in circumventing a misbehavior then he/she is faced with responding to the misbehavior.

Responding Skills

The Teacher Effectiveness Program (TEP), working in a formative, coaching mode with teachers and administrators, refines what the teacher should do and/or say in reaction to the full range of misbehavior (from innocent mischief through to a deliberate power struggle with the teacher) and fine tunes the adminstrator's skills in gathering descriptive data about the handling of the situation. However, our immediate purpose, as summative evaluators, is to assess the degree to which a teacher exhibits skill in handling the situation and getting the class back on an even keel. The main aim must be to restore social order quickly and return to a productive use of academic learning time (not to win the power struggle at any cost).

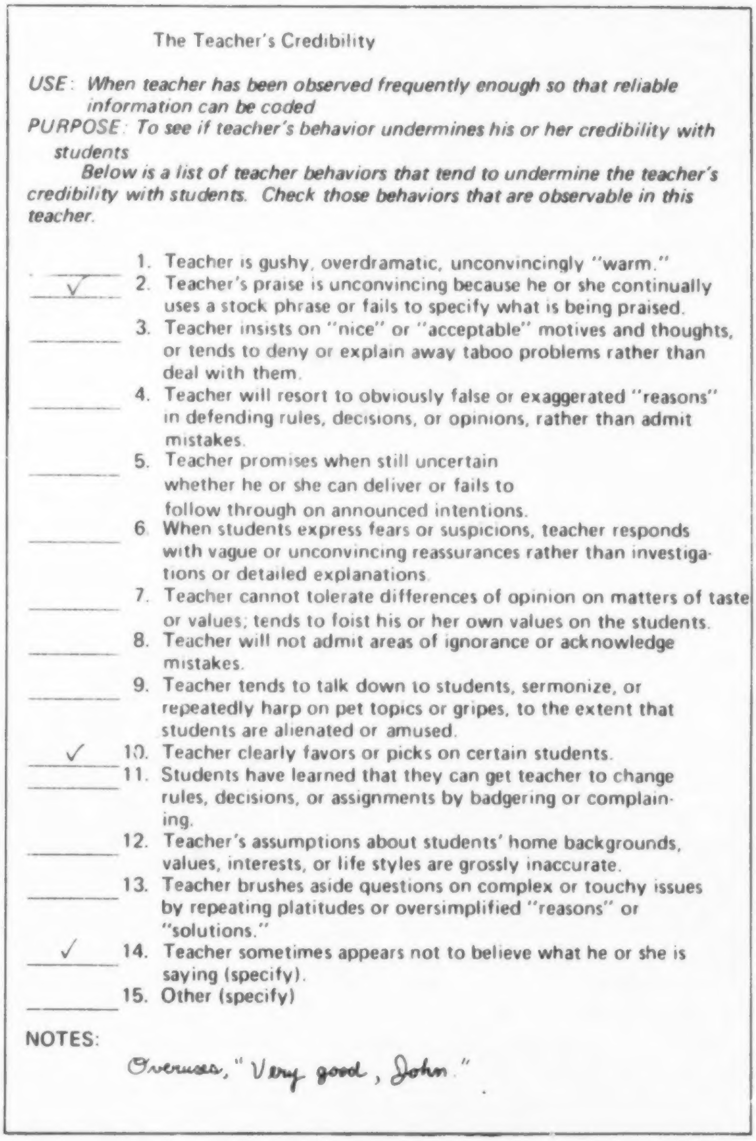
Another group of teacher behaviors stems from the teacher's knowledge and use of the Principles of Logical Consequences (again a component of TEP). Through a creative matching of consequence/punishment to the "crime", students can be helped to accept the cause-and-effect relationships of their actions and to recognize the inherent fairness of a corrective action taken by the teacher. Through an internalization of these principles of logical consequences a teacher can learn to make more informed choices about how to "discipline" a student who has misbehaved and how to help the student accept responsibility for his own actions (another worthwhile outcome of schooling). Thus the student develops an "internal" locus of control instead of always blaming other people or events for everything that happens to him ("external" locus of control). A teacher who has a planned repertoire of reactions to fairly standard situations will expend less energy when these misbehaviors do occur and will be able to deal with them deliberately in a calm, self-controlled manner instead of allowing emotions to influence the response. These become internalized routines which allow the teacher to take these situations comfortably in stride.

It is time to turn our attention to those particular behaviors highlighted that represent a mix of both preventative and responsive strategies.

If you have the set of videotapes that complement this written material, find the one labelled Tape 2-1 (Accession Number - Classroom Management and Control Strategies). Advance the tape to the place where the title "Evaluating and Improving Teaching Performance: Inservice Kit" appears and set your tape counter to 0000. The master tapes are on 3/4" videotape but they can be dubbed onto other sizes of tape. The writer has provided the numbers that correspond to her VHS machine and this may assist you in locating particular clips on the tape. Use the blank space beside any VHS numbers to record the counter numbers on your own machine for easier retrieval. At VHS 0020, an overview of the teaching strategies included in the module is presented. Following the overview is a description of Module One - Rules and Routines and four examples from classrooms. Please read the manual first and then watch the videotaped segments. With collegues you should discuss particulars of each illustration after you have watched it. Please do not feel obliged to look at all of the examples if you feel two or three will suffice. Where possible, I tried to include illustrations of each behavior from different grade levels.

Instrumentation

A collection of instruments is included here. Examine them to determine their degree of objectivity and application to your own needs. For example, one instrument requires a rating of one to five with suggested indicators to look for and space for a few more notes while observing. Another instrument poses questions to think about. Another (The Teacher's Credibility, page 2-7) includes statements which may or may not apply to the observed teacher's behavior. Many of the 14 items require an inferential judgement on the part of the observer. An instrument that looks like this could be mistaken as a low inference instrument when, in fact, it is a high inference one. The authors of the instrument caution users that the teacher should have been "observed frequently enough so that reliable information can be coded." You will remember the dangers inherent in the exclusive use of high inference rating scales (Chapter One, page 1-23).



The Teacher's Credibility

USE: When teacher has been observed frequently enough so that reliable information can be coded

PURPOSE: To see if teacher's behavior undermines his or her credibility with students

Below is a list of teacher behaviors that tend to undermine the teacher's credibility with students. Check those behaviors that are observable in this teacher.

________ 1. Teacher is gushy, overdramatic, unconvincingly "warm."

___✓___ 2. Teacher's praise is unconvincing because he or she continually uses a stock phrase or fails to specify what is being praised.

________ 3. Teacher insists on "nice" or "acceptable" motives and thoughts, or tends to deny or explain away taboo problems rather than deal with them.

________ 4. Teacher will resort to obviously false or exaggerated "reasons" in defending rules, decisions, or opinions, rather than admit mistakes.

________ 5. Teacher promises when still uncertain whether he or she can deliver or fails to follow through on announced intentions.

________ 6. When students express fears or suspicions, teacher responds with vague or unconvincing reassurances rather than investigations or detailed explanations.

________ 7. Teacher cannot tolerate differences of opinion on matters of taste or values; tends to foist his or her own values on the students.

________ 8. Teacher will not admit areas of ignorance or acknowledge mistakes.

________ 9. Teacher tends to talk down to students, sermonize, or repeatedly harp on pet topics or gripes, to the extent that students are alienated or amused.

___✓___ 10. Teacher clearly favors or picks on certain students.

________ 11. Students have learned that they can get teacher to change rules, decisions, or assignments by badgering or complaining.

________ 12. Teacher's assumptions about students' home backgrounds, values, interests, or life styles are grossly inaccurate.

________ 13. Teacher brushes aside questions on complex or touchy issues by repeating platitudes or oversimplified "reasons" or "solutions."

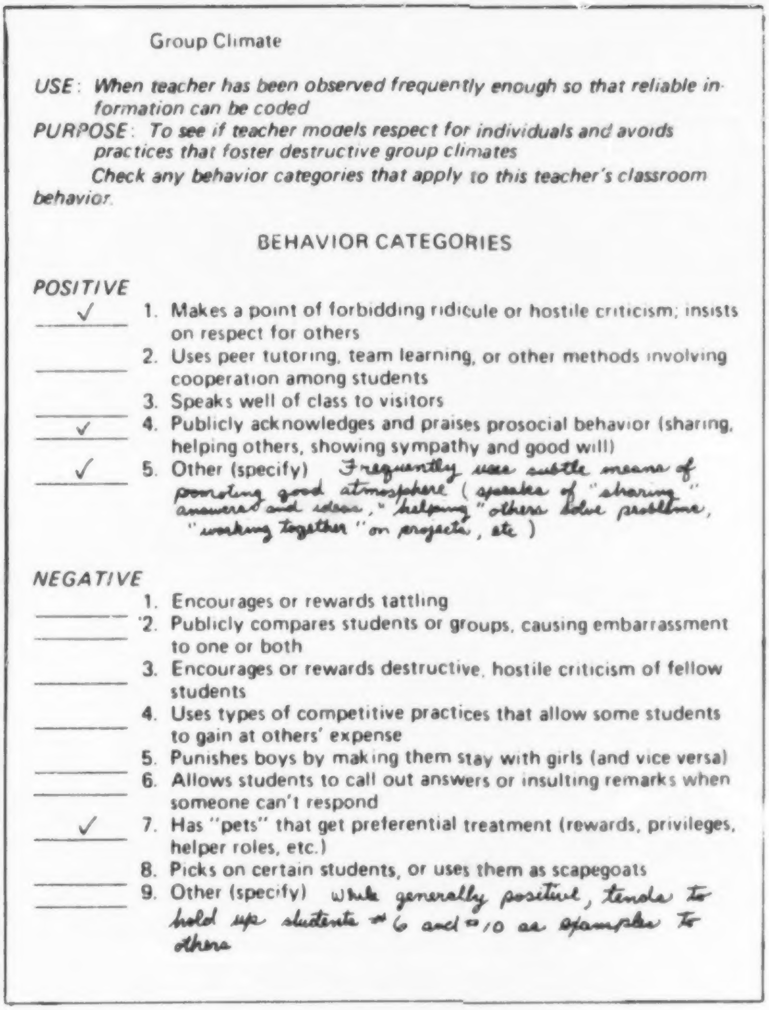
___✓___ 14. Teacher sometimes appears not to believe what he or she is saying (specify).

________ 15. Other (specify)

NOTES:

Overuses, "Very good, John."

Looking in Classrooms - Second Edition. Thomas L. Good and Jere E. Brophy, New York: Harper & Row, Publishers. 1978. page 162



Group Climate

USE: When teacher has been observed frequently enough so that reliable information can be coded

PURPOSE: To see if teacher models respect for individuals and avoids practices that foster destructive group climates

Check any behavior categories that apply to this teacher's classroom behavior.

BEHAVIOR CATEGORIES

POSITIVE

✓ 1. Makes a point of forbidding ridicule or hostile criticism; insists on respect for others

____ 2. Uses peer tutoring, team learning, or other methods involving cooperation among students

____ 3. Speaks well of class to visitors

✓ 4. Publicly acknowledges and praises prosocial behavior (sharing, helping others, showing sympathy and good will)

✓ 5. Other (specify) Frequently uses subtle means of promoting good atmosphere (speaks of "sharing" answers and ideas, "helping" others solve problems, "working together" on projects, etc)

NEGATIVE

____ 1. Encourages or rewards tattling

____ 2. Publicly compares students or groups, causing embarrassment to one or both

____ 3. Encourages or rewards destructive, hostile criticism of fellow students

____ 4. Uses types of competitive practices that allow some students to gain at others' expense

____ 5. Punishes boys by making them stay with girls (and vice versa)

____ 6. Allows students to call out answers or insulting remarks when someone can't respond

✓ 7. Has "pets" that get preferential treatment (rewards, privileges, helper roles, etc.)

____ 8. Picks on certain students, or uses them as scapegoats

____ 9. Other (specify) While generally positive, tends to hold up students #6 and #10 as examples to others

Looking in Classrooms - Second Edition. Thomas L. Good and Jere E. Brophy, New York: Harper & Row, Publishers. 1978. page 160

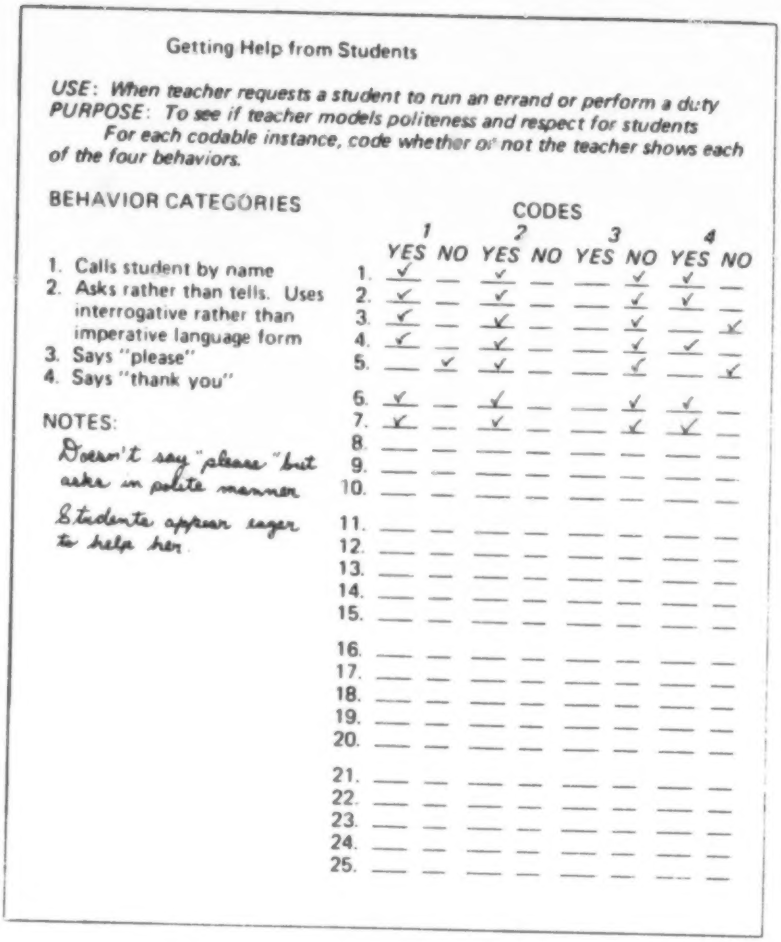
Personal Relationships with Students

USE: When teacher has been observed frequently enough so that reliable information is available

PURPOSE: To see if teacher models an interest in individual students
Note any information relevant to the following questions:

1. Do students seek out this teacher for personal contact? Do they show things, make small talk, seek advice? No. They usually come to him only when they need something (permission, help, supplies).
2. Does the teacher actively seek out individual students for informal personal contacts or must they come to the teacher? No informal contacts observed.
3. Is the teacher accessible to students before, during, and after school hours? Yes but see #1
4. When students tell the teacher things, does he or she listen carefully and ask questions, or respond minimally and cut short the conversation? He often responds curtly or cuts short the conversation by giving a direction.
5. When the teacher questions students in informal contacts, does he or she ask open-ended questions seeking their opinions, or leading or rhetorical questions that elicit only cliché responses or compliance? No informal questions observed.
6. How does the teacher react when students mention taboo topics? Does he or she tolerate discussion or quickly close it off? Not observed.
7. In general, does the teacher talk *to* students, or *at* them? Does he or she use a natural voice, or a special "teacher tone"?
   Teacher is cold, standoffish. Students avoid him. He is "strictly business" in dealing with them. Much "teacher talk"

Looking in Classrooms - Second Edition. Thomas L. Good and Jere E. Brophy, New York: Harper & Row, Publishers. 1978. page 156



Getting Help from Students

USE: *When teacher requests a student to run an errand or perform a duty*
PURPOSE: *To see if teacher models politeness and respect for students*
For each codable instance, code whether or not the teacher shows each of the four behaviors.

BEHAVIOR CATEGORIES

1. Calls student by name
2. Asks rather than tells. Uses interrogative rather than imperative language form
3. Says "please"
4. Says "thank you"

NOTES:

Doesn't say "please" but asks in polite manner

Students appear eager to help her.

CODES

	1		2		3		4	
	YES	NO	YES	NO	YES	NO	YES	NO
1.	✓		✓			✓	✓	
2.	✓		✓			✓	✓	
3.	✓		✓			✓		✓
4.	✓		✓			✓	✓	
5.		✓	✓			✓		✓
6.	✓		✓			✓	✓	
7.	✓		✓			✓	✓	
8.								
9.								
10.								
11.								
12.								
13.								
14.								
15.								
16.								
17.								
18.								
19.								
20.								
21.								
22.								
23.								
24.								
25.								

Looking in Classrooms - Second Edition. Thomas L. Good and Jere E. Brophy, New York: Harper & Row, Publishers. 1978. page 153

Teacher uses non-verbal communication to contribute to the mood of the lesson

1 Low	2	3 Med	4	5 High	Not Observed

Notes

- uses facial expressions
- warmth, smile
- uses wait time between important points
- uses gestures
- uses body attitude
- varies voice inflection

(Adapted from MacCannell and Young, 1980)

CHAPTER TWO - MODULE ONE

RULES AND ROUTINES

(Plans, Organization And Implementation, Teacher's Expectations, Task Oriented/Businesslike Orientation)

> "Teachers should have a system of rules that allows pupils to attend to their personal and procedural needs without having to check with the teacher."

Rules and Routines

To ensure that classroom operations and procedures run smoothly on a daily basis, the students must have an understanding about what is permitted and what is expected of them. The establishment of rules about desirable behavior, agreed upon jointly by the teacher and students, leads to the development of social responsibility, a positive attitude toward school, and the ability to make appropriate social decisions. These rules are ideally formulated in co-operation with students during a class discussion. Shared decision-making can lead to the successful implementation of rules that work for a particular classroom. When students take part in co-operative planning and task involvement of this nature, they tend to accept more responsibility for their own behavior. This exercise helps to establish democratic ideals as well. However, some teachers have a very workable set of rules but did not involve students in formulating them. The important thing is that students understand the rules and follow them. They must know "who does what by when" so instructional time is not wasted. This internalization of a set of rules and routines reduces the need to make on-the-spot decisions. Only discrepancies and abnormalities need be noted and acted upon.

At the beginning of the year it is easier for the observer to identify the set of rules in operation for as they are becoming established, the teacher frequently reminds the students of them. They may, in fact, be posted on the wall in the form of "Thou Shalt Nots" or better still, positively stated in terms of "Thou Shalts". A minor point perhaps, but most negative rules can be restated to indicate what students should be doing in particular situations (rather than what they should not). Such a slant helps to contribute to a positive classroom atmosphere.

Later in the year, however, all vestiges of these written rules may have vanished from the walls (and from teacher-student dialogue) and the rules are operating so smoothly that the observer really has to concentrate to determine what they are. One can always ask the teacher to confirm things but most classroom rules can be ferreted out by watching what students do. If, on the other hand, students seem to interrupt the teacher constantly to ask about routine matters and the teacher looks frustrated with the interruption and/or says, "You should know...", an efficient set of rules and routines is not in operation - at least not with some students. Is it true of the entire class?

In a classroom where instruction proceeds smoothly, it is tempting to assume that there are no rules and that students just seem to have an instinctive knowledge of what they should do. This belief would be short-changing the teacher who should be given credit for establishing an unobtrusive set of rules that work! A true test would be effected if a substitute teacher with classroom control deficiencies (not that we have any of those) were to assume responsibility for the class. The observer might note a deterioration of conduct that would not be in evidence under the regular classroom teacher whose rules are well understood and observed by the students. Some students will always take advantage of an "ambiguous" situation and it is this set of rules that precludes ambiguity. The point is that the observer may have to watch students carefully to infer what set of rules they are operating under.

- What do they do if they are finished their work early?
- How do they acquire a pen/pencil if the need arises?
- Where do they hand in completed work?
- When may they leave the room, if at all?
- What do they do in case of sudden illness (exit - stage left - quickly!)?
- How are materials distributed and collected? Does the teacher make use of student assistants? How are they appointed?
- How does a student needing assistance get it if the teacher is working with another student or working with a group? Does he wait? Does he do something else while he waits? Does he get out of his desk to ask a classmate? How will the teacher know he needs help? Will he hold up a hand or place a book upright on his desk as a signal?

Some rules you will see in operation are not good rules but they are the rules that are in operation - the set of procedures students understand and observe. For example, students may behave in inappropriate ways and the teacher sees and apparently condones the behavior or the teacher repeats the same directions over and over each time a different student asks the same question. The observer would see that the teacher has rules, (bad habits) but they are the reason for a lot of wasted classtime, needless interactions with the teacher and are, therefore, non-functional. Such teacher behavior may be fulfilling attention-seeking needs of some students, but there are better ways to accommodate these needs. Besides which, promoting listening behavior in students is to be encouraged, as is assisting students in taking responsibility for their own work and timelines. Therefore, rules and routines which maximize the use of time are to be promoted. They are a means to an end, not an end in themselves.

Examples

Student gets out of seat during independent work time, goes to blackboard and writes his name in bottom corner and leaves the room. He returns in two minutes, erases his name, and sits in his desk. The inference is that students may leave the room during certain times if they inform the teacher of their whereabouts. A conversation with the teacher confirms this and adds information that only one student of the same sex is allowed out of room at one time so a student may have to wait until another returns. If abuses occur (a student leaves too often) this is dealt with on an individual basis, not by withdrawing the privilege from all students. Certain times are not appropriate times for leaving the room, except for emergency situations.

During opening exercises students hold up three sharpened pencils. The observer notices a can full of sharpened pencils on the teacher's desk. Discussion with the teacher reveals that the pencil sharpener is noisy and students prepare for class by rounding up three sharp pencils. This minimizes having to use the sharpener during class time.

Video - Rules and Routines

At this point, on tape 1-1 (Accession Number ______), watch the description of rules and routines (VHS 0043) and examples A, B, C, and D (VHS 0104-0287).

3/4" 092
VHS 0104
Yours ______

Illustration A - Grade 7, Language Arts

Morning bell rings. Students in seats listen to the P. A. announcements attentively. Merv stands at front of room. When messages have finished he says "Do we have a volunteer to tell us what the first and third announcements were this morning? Alright, Wes." Thus students are held accountable for listening to the announcements because any one of them could be asked to repeat the announcements to the class.

3/4" 157
VHS 0183
Yours __________

Illustration B - Grade 2/3, Language Arts

As part of her own opening announcements on Monday morning, Heather informs the students where the materials for the Time Bingo game have been placed. Then she changes helpers for the week. Those selected are allowed to choose a particular job and she pins their names to the arms of an octopus on her chart. Next, she asks who might like to share some news with the rest of the class.

3/4" 196
VHS 0232
Yours __________

Illustration C - Grade 9, Social Studies

As the class ends, one student from each table gathers up the text books they have been using and puts them on the side counter. Ron expects the students to leave the room and change classes in an orderly way.

3/4" 216
VHS 0257
Yours __________

Illustration D - Grade 1, Language Arts

Just before the lunch bell, Helen asks students to put their materials away and tidy their desks. As soon as each whole row is ready she dismisses the row for lunch. Two students who rushed out need to be reminded of the "no running" rule by the teacher.

Instrumentation

The first thing to do is to determine a set of rules or operating procedures that would suit the situation you are observing. For example, a Grade 9 science lab, a Grade 6 art project in the art room (making a class mural), or a Grade 2 language arts lesson would each require certain specifiable behaviors of the students. The list of things you may expect to see (under "Rules and Routines") would vary with both age and activity. It is a useful experience to jot down, in advance of observing, some of these rules/routines you might expect to see and to anchor your observations to these. Be open to recording those you were not able to identify in advance. Teacher behaviors should be situational and should respond to the needs of a particular setting and so, too, should your observational data gathering. It is still possible to judge, on a global level, whether the teacher is "using an efficient set of rules and routines" but the particulars, against which you judge this, must be applicable to each individual teaching situation. Do not forget that when you tailor your observational procedures to suit the teacher's objectives, the evaluative process you use will be seen to be fairer and more appropriate by the teacher. It is still possible for you to be consistent from classroom to classroom by focusing on broadly stated teacher behaviors, while keeping in mind that indicators in evidence will vary in each specific teaching situation.

Some possible ways to record how well the teacher is using rules and routines are presented next.

Teacher should have a set of rules that...

1	2	3	4	5	N/A
Low				High	

N/A means "not applicable."

OR

1	2	3	4	5	6	7	N/A
Low						High	

OR

1	2	3	4	5	N/A	N/O
Low				High		

N.O. means "not observed." This could mean that no instances of a behavior were exhibited by the teacher even though it might have been appropriate teacher behavior. Not observed could also mean that you missed it. Were you skilled enough to pick it out and to notice the subtle indicators?

A more useful way to organize the data collection form is to state the behavior and list some of the more frequent indicators and to note any other teacher actions that indicate the behavior is in operation. If you have to assign a numerical rating, it will then be based on more information and a consideration of a variety of factors.

Teachers should have a system of rules that...

---

1 Low	2	3	4	5 High	N/A	N/O

Notes

Indicators

- reduces unnecessary interruptions
- uses set routines to move children and materials
- notices when routines are not working well and intervenes
- reminds students of proper procedures when necessary
- uses class members to assist with the distribution of materials
- etc

(Adapted from MacCannell and Young, 1980)

CHAPTER TWO - MODULE TWO

WITHITNESS, AWARENESS

(Teacher Awareness)

Teachers should be aware of what is happening throughout a classroom even though involved with an individual or small group. This awareness will enable the teacher to spot potentially disruptive behavior and act upon it before it becomes unmanageable.

Awareness

Awareness, or "withitness," is an extremely critical teaching skill. A teacher exhibiting awareness behavior is on the alert and attending to cues that may signal student inattention or the percolation of misbehavior. Without this ability, a teacher can be instructing in the middle of chaos and not even notice that many students are not engaged in learning activities. Teacher awareness is not as mysterious as a sixth sense but instead is a highly developed sensitivity to subtle (or not so subtle) student behaviors. It is virtually impossible for even the very skilled teacher to notice everything, but not too many incidents will escape her attention. The cauldron never gets a chance to bubble over. As the observer, you should be able to identify indicators of awareness that include scanning and proximity. Where does the teacher look? At her book? In the centre of the class over the tops of the students' heads? Or does the teacher look directly at students and move among them?

Teacher Eye Movements

Watch the "aware" teacher's eyes. They never rest in one place for very long. The teacher looks up and around frequently, pausing here and there to gain a bit more information about students and how they are behaving. Students suspect she has "eyes in the back of her head." The teacher is looking for hints that students are bored, frustrated, or in need of assistance, as well as watching for overt signs of mischief.

Scanning involves sweeping the eyes around the room for the sole purpose of detecting student off-task behavior. Scanning cannot be informative if the teacher is preoccupied while doing it. The teacher has probably developed extrasensory scanning for the two or three students who can be expected to misbehave. There is a heightened awareness of the tell-tale signs that spell trouble brewing. It is this skill that must be expanded so the teacher is aware of more student activities. Students are skilled in looking engrossed and innocent when they are not, and teachers have to be able to identify potentially disruptive situations in order to redress them in a timely fashion.

Teacher Movement Around The Room

Sheer physical presence can deter a student from initiating a disturbance and while "on the rounds," a teacher can glean more information and keep tabs on individual students. "Toys" and twiddlers won't be taken out of desks (and lost to the teacher's collection) if "old faithful" will be patrolling around again soon. An alert teacher moves quickly and quietly, not in a frenetic way that in itself can create a disturbance (one conjures up the image of a whirling dervish). Consider the physical layout of the classroom. Does the arrangement of furniture facilitate easy teacher movement to all parts of the classroom? Or is it more like an obstacle course?

Strategic Positioning

The alert teacher consciously maximizes the chances of spotting problems by standing or sitting in places where it is possible to see most or all of the students. Thus the behavior of "greeting students at the door" (see page 2-4) qualifies as an example of strategic positioning to see and hear as much as possible. While working with an individual or small group, the teacher should look up frequently and quickly assess the attending behavior of the rest of the class. This is facilitated by positioning oneself so that work with the student(s) is possible and so that other children can be supervised as well. For example there are many ways to position oneself when giving a few minutes of individual assistance to a student:

- standing or crouching facing the student
- behind the student
- off to the right or left
- having student come to work with the teacher at the side of the classroom

Which of these options affords the teacher the best chance of watching other students as well? The best defence is a good offence. Students soon learn that nothing escapes the alert teacher's notice. In classrooms where students have accepted responsibility well, the teacher does not need to be as concerned with constant vigilance. Again, this attests more to the teacher's skill in encouraging good working habits in the students than to the students' innate desire to stay on task.

The observer will sense the degree to which the teacher is "on top of things" by watching for the above indicators and by noting facial expressions (quizzical) and pauses in teacher behavior that signal that the teacher has spotted something and is deciding what to do about it.

TEACHER RESPONSE TO MINOR DISRUPTIONS

Once the teacher has seen or heard a hint of a problem (and has, perhaps, demonstrated an indication of this awareness), the next step must be taken. This will involve making one of three decisions.

Ignore

Operating with more information than the observer has, the teacher knows that Bill (the student talking) is very co-operative and is rarely involved in a disturbance and although Bill is talking to a classmate, the teacher anticipates that the contact is work-related and will probably end soon. The teacher apparently notices this student but has chosen to let it go. The behavior stops and no corrective action has been taken.

An "ignore" would not be justified if, as the observer notes, the conversation has expanded to include five classmates. Certain minor student interactions can be ignored safely, but they should have been seen, assessed, and purposely disregarded by the teacher. Students borrowing erasers, clarifying a word on the blackboard, or retrieving a pencil from the floor are examples of this type.

Defer

Another choice the teacher has after noting a misbehavior is deferring corrective action to a more convenient time. This may cause less embarrassment to the student and may allow the teacher to finish off an instructional activity that might suffer from the interruption. Depending on the nature of the student behavior (student "scratching," daydreaming/sleeping, borrowing a required item repeatedly, or teasing a neighboring student) the teacher may decide to draw minimal peer attention to it. Having a private word with the student, quietly reminding the student to "pay attention" and asking for more effort in this regard, finding him an extra eraser to use, or moving the student's desk to a new location would help to solve the problem. The teacher chooses the least disruptive course by deferring action until the interaction can occur relatively privately. Dealing with any of the above disturbances in a public way would only serve to interrupt ongoing instruction. The observer may wonder whether the teacher has actually seen an incident and may have to wait to confirm that this is the case.

Perhaps the teacher tells the student that they should meet at lunch for a few minutes to discuss the matter in more detail. The Teacher Effectiveness Program (TEP) outlines ways teachers can help the student to realize why the behavior is causing a problem, ways to help the student accept ownership of the problem and to explain why the behavior occurred, and ways to work together co-operatively to extinguish the behavior. If the behavior is offensive and deeply ingrained, a series of such meetings and a "contract" with the student may be required until the behavior is successfully reduced or extinguished. Project Teach (a course offered through the A.T.A.) offers practical techniques for questioning students to elicit underlying reasons for their behavior.

Act Now

The third choice, that of dealing with the misbehavior now, is the most usual and often the most appropriate course. How and what will be done will vary with the misbehavior. A sledgehammer is not needed to kill a mosquito, and the teacher should attempt to use "low-key" remedial measures, where possible. The teacher's main aim should be to restore social order as quickly as possible and to get the student back on task (not to exact a pound of flesh). The variety of possible responses is considered in the next section (Chapter Two - Module Three). An explanation of which behaviors are considered to be "low key" and why these are preferable is considered there. What is important to us here is that the teacher has noticed a variety of potentially disruptive incidents and has moved quickly to the next step - that of deciding what to do. The point at which the teacher intervenes should be as soon as possible so that other students do not become involved and so attention is not diverted from the lesson.

* If the misbehavior is of the life-threatening variety it must be stopped immediately at all costs. The best method will depend on the situation but activities such as careless handling of scissors or sword fighting with rulers are dangerous and must be brought to an abrupt halt.

Video-Awareness

Tape 2-1, Classroom Management and Control Strategies. First is a description of awareness (VHS 0287) followed by four video clips of teachers demonstrating the behavior (VHS 0325-0447).

3/4" 269
VHS 0325
Yours ____________

Illustration A - Grade 8, Language Arts

The class begins its daily silent reading period. Ron settles down with a book too but looks up often to make sure the class is on task. He spots a student with unsuitable reading material and quietly approaches the student and directs him to choose something from the bookcase at the front. Ron resumes reading but looks up at the students from time to time.

3/4" 301
VHS 0367
Yours ______

Illustration B - Grade 12, Math

The next question they will do is number 8. Marilyn watches them work at it independently before she does it with them on the board. She erases the front board and checks over her shoulder to ascertain whether the noises she is hearing are "working noises."

3/4" 320
VHS 0391
Yours ______

Illustration C - Grade 2/3, Language Arts

Heather is helping individual students with their spelling while seated at her desk. She looks at the rest of the class and notices what they are doing. ("s-o-f-t-l-y, e-v-e-r-y, Tanis you're doing well.")

3/4" 339
VHS 0415
Yours ______

Illustration D - Grade 5/6, Language Arts

Jim crouches down to talk with one student, then has a quick interaction with the next student as he monitors their writing of a mystery story. He comes to centre front and leans against his desk to watch the students. His eye movements show he is scanning the room. When a hand goes up, he comes over to the student's desk to help.

Instrumentation

Although observable, teacher awareness is fairly difficult to substantiate. Using all the indicators mentioned, and adding others that contribute evidence of the teacher's "withitness," try to describe the level of the teacher's skill. You will not have noticed some of the initial cues to which the teacher reacted but you will see that the teacher felt they were important enough to deserve attention.

Teacher demonstrates an awareness of student behavior.

1	2	3	4	5
				High

NOTES:

- teacher scans students frequently.
- teacher moves around the room a lot, taking note of what students are doing.
- teacher positions him or herself in classroom to oversee as many students as possible at any given time.
- teacher's facial expressions convey a heightened interest in particular student activities.
- teacher chooses course of action quickly and does not delay if direct intervention is required.

(Adapted from MacCannell and Young, 1980)

Poor Attention to Lessons

USE: When teacher is having difficulty keeping students attentive to a lesson
PURPOSE: To identify the probable cause of the poor attention

When students are notably inattentive to a lesson or activity, what is the apparent reason? (Check any that apoly)

______ 1. Activity has gone on too long
______ 2. Activity is below students' level or is needless review
______ 3. Teacher is continually lecturing, not getting enough student participation
___✓___ 4. Teacher fails to monitor attention—poor eye contact
___✓___ 5. Teacher overdwells, needlessly repeating and rephrasing
______ 6. Teacher calls on students in an easily predictable pattern
______ 7. Teacher always names student before asking question
___✓___ 8. Activity lacks continuity because teacher keeps interrupting (specify cause for interruption)
______ 9. Activity lacks variety, has settled into an overly predictable or boring routine
______ 10. Other (indicate)

Frequent delays while teacher finds place in manual. This is also main reason for poor eye contact. #5 often asks teacher for attention (and gets it) but then instead of teaching the teacher elaborates for 30 - 40 seconds on why the students should listen and when he ends the sermon and begins the lesson several students have "drifted" away.

Looking in Classrooms - Second Edition. Thomas L. Good and Jere E. Brophy, New York: Harper & Row, Publishers. 1978. page 195

CHAPTER TWO - MODULE THREE

LOW-KEY RESPONSES TO MISBEHAVIOR

(Classroom Problem Management, Feedback To Pupils, Concurrent Tasks Managements)

> **"Teachers should prevent misbehaviors from continuing before they increase in severity or spread to and affect other children."**
>
> **"Teachers should attempt to direct disciplinary action accurately...that is, at the child who is the primary cause of the disruption."**
>
> **"Teachers should handle disruptive situations in a low-key manner. Disruptive or off-task students should be corrected by nonverbal behavior such as eye contact."**

Nip in Bud

The teacher may receive fairly subliminal cues that something is "wrong." The mind is already well occupied with phrasing questions, listening to student responses, giving academic feedback, while keeping an eye on the clock. The brain can only process so much information. Attending to subtle cues of misbehavior that signal the potential disturbance is dependent on teacher scanning. The teacher certainly can attend to obvious cues; by then there is a disturbance that anyone can see. Effective teachers respond to these cues so quickly that you (the observer) could walk away with the mistaken impression that the students just behave well and the teacher is lucky.

Do not miss crediting the teacher with excellence in preventative classroom skills. Keep a sharp eye and watch for the low-key intervention. Why did the teacher just walk up that row while continuing to teach the lesson? Chances are that in her left hand is an item taken from a student as she purposely walked by his desk. Chances are that the teacher tapped a girl on the shoulder as she passed to let her know she wanted full attention to the lesson.

In the initial stages of the misbehavior, the student is frequently quite aware of his/her own behavior and may be taking care not to attract teacher attention. Of course, at other times the disturbances caused are completely unintentional. In any case, they are behaviors worthy of teacher attention. The teacher must exercise the reactive skill of bringing a timely halt to all incidents, intentional or otherwise, that hold the potential for interrupting instruction.

The decision to act now is inextricably tied in with teacher "awareness" (the teacher has to see or hear some indication first) and with "low-key behaviors" (because the teacher has to minimize the disruption and decide what to do). It is somewhat redundant to belabor this skill further except to emphasize its key ingredient - acting quickly. Another aspect of the same skill is fingering the right culprit, and this is dealt with next.

Nab Culprit

Habitual misbehavers are often clever enough to avoid detection. These students initiate a minor disturbance, yet look completely "innocent" by the time the teacher has caught the first whiff. Nabbing the right student is an important part of the skill of dealing with classroom misbehavior. We have all had first-hand experience in (either avoiding detection or) being unjustly accused. It does little good to proclaim one's innocence in some situations. It is tempting for the teacher to affix blame on the most obvious source of the disruption who may, in fact, be the victim of circumstances. Frequent teacher "mistakes" of this sort do little to enhance the teacher's credibility.

As the classroom observer you often see far more than the teacher is able to see. For example, in her three month study in one classroom, the writer frequently watched Edward set Geoffrey up. The teacher reacted quickly but by then Edward was usually busily engrossed and Geoffrey was left holding the bag. Given his need for attention (and rather delightful personality) Geoffrey needed little excuse to become incriminated and was an easy mark. However, one had to admire Edward's skill in maintaining the impression of being "on task." Curiously enough, in conducting Stimulated Recall* sessions with the teacher (*the replaying of videotaped lessons and gathering of detailed teacher perceptions about many aspects of instruction) the teacher picked up on some of Edward's overtures captured on tape and commented on how Geoffrey usually seemed to deserve more of the blame. The example illustrates how difficult it is for the teacher to identify the more adroit students as being involved.

In practice, the ineffective teacher waits too long to investigate and react and by then too many players are involved. It seems simpler to penalize the whole class at this stage. Invariably, on such an occasion when the teacher decides to keep all students in for 15 minutes after school, someone's dad is fuming outside in a waiting car and someone else is missing a violin lesson. (Some things you can count on.) Many students were not a part of the disturbance and have been punished unfairly. At this point, parents as well as students have become resentful of the teacher.

By cultivating a heightened awareness, the teacher should be able to intervene more quickly, and will stand a better chance of directing disciplinary action accurately.

Rationale for Using Low-Key Techniques

By definition, "low-key" ways of handling a situation do not involve overdramatization, overdwelling, or overreacting. They represent the least disruptive path the teacher can take in restoring social order. Such tactics, using the minimal amount of corrective action required, are recommended for the following reasons:

- The class is not penalized by stopping an ongoing activity.
- The distraction is localized and contained and stopped.

- The teacher's aim of optimizing academic learning time can be maximized by not fragmenting the learning time or by effecting a speedy return to the learning.
- The teacher avoids aggravating the situation further and distracting and upsetting other students.
- The offender is deprived of a great deal of peer attention (which (s)he may be craving) because the teacher does not help to focus class attention on the deviant student.
- A studied, "calm" reaction makes it more possible to analyze the situation accurately (buys a little time to think).
- Owing to the nature of low-key responses, the teacher does not appear to lose self control in front of the students.
- The general level of tension in the room is kept relaxed, maintaining a positive classroom atmosphere.
- Likewise, adopting a low-key strategy reduces any teacher stress resulting from the confrontation.

Cummings (1983:65) describes the Low Key approach as the "Law of Least Intervention - handling misbehavior in a way that takes the LEAST amount of time, LEAST amount of teacher effort, LEAST unpleasant feelings, and creates the LEAST disruption to the learning environment."

LOW-KEY BEHAVIORS

As a general definition, a low-key behavior is a corrective action that purposely downplays an incident with a student and allows the teacher to resume teaching as soon as possible or, better still, does not interrupt the teaching at all. Many low-key strategies are non-verbal, which means they escape the notice of students who are not involved in the incident but they can also escape your notice if you do not watch the teacher carefully.

The general rule of thumb for the teacher is to pause, take a few quiet deep breaths, while maintaining a "poker" face, and to decide which of the various strategies will most quickly solve the problem. (The main "problem" is that the teacher cannot continue to teach at the present time and this problem must be solved first.) If the misbehavior is part of a continual problem between the student and the teacher, it can also be addressed at a time most suitable to the teacher. For the moment, the misbehavior itself has to be stopped. It is presumed that the misbehavior is a minor sort of offense and does not warrant a heavy-duty response from the teacher. It also presumes that this is one of the first few times the behavior has been exhibited by the student. If this is a persistent misbehavior, it is time to move away from using low-key techniques and to use a more pronounced correction. A single strategy or a combination of several strategies may be required to bring a halt to a minor disturbance. Examples of the various options a teacher may choose to use are now presented.

Eye Contact

We have already mentioned how the teacher can use eye contact as a preventative strategy. It can be used for establishing a good rapport with students by including them in the teacher's glance and smiling and noticing them with interest. Positive reinforcement, using eye contact, would involve directing pleasant, approving looks at the student when he/she is behaving in an acceptable fashion. The importance of using eye contact was highlighted as an indicator of teacher alertness. This withitness is evidenced by watching the teacher scanning the class to assess the on-task behavior of students. Eye contact is also used to advantage as a disciplinary measure in response to student misbehavior. By aiming a look of inquiry or disapproval (the "Look") at the student, the teacher communicates the recognition of deviant behavior and the implicit request to stop it.

Holding this "pointed look" too long may lock the teacher and student into the initial stages of a power struggle but sustaining eye contact is important. This communicates that the teacher finds the behavior unsuitable and the student should experience subtle pressure to discontinue it.

Facial Expression

The teacher's facial expression can be quizzical, neutral, or disapproving. This is used in conjunction with sustained eye contact to convey the teacher's dissatisfaction with student behavior. Some teachers have mastered the art of raising one eyebrow, which sends a rather powerful message.

Gesture

The teacher may have instituted a series of hand signals that are fully understood by students. For example, pointing a finger can signal a variety of intentions. Used in combination with a particular facial expression and eye contact, clear messages can be sent across the room. A teacher is able to redirect the student to an empty desk, or up to the garbage can. A stop-the-traffic policeman hand sign can "silence" a student who is talking to a friend. To regain class attention, a teacher may raise a hand and wait until students are ready to resume the lesson. An example follows.

> A rather noisy, "hands on" lesson is in progress. Many students are confused and the teacher needs to explain the procedures again. Some students are busily engrossed in the work. The teacher stands and raises her hand in the air. Those students who see her, stop talking and raise a hand. Students see other students with a hand up and follow suit. The teacher is able to identify the last few stragglers and can begin.
>
> Flicking the lights off and on again could be used in this situation too. These two strategies are useful when the class is particularly noisy (eg., a Friday p.m. art lesson) and the teacher does

> not wish to out-shout the students. However, both these behaviors may be unsuitable for use with an older group of students, but the teacher will have to regain their attention and clarify the confusion.

Body language, such as arms folded across the chest or a hand on the hip, communicates teacher impatience or annoyance. In combination with eye contact, the message sent to the student will be unmistakable.

The Pause

Stopping mid-sentence and waiting is a teacher technique that may attract the deviant student's attention. After the student has stopped the misbehavior in any of the above cases, a quiet "thank you" can signify both the importance of paying attention and the teacher's appreciation of student co-operation.

Proximity

One of the most effective low-key corrections is moving close to students. The teacher continues to instruct or ask questions while moving near the offender so the flow of the lesson has not been interrupted. In a preventive sense, frequent teacher movement around the room discourages the initiation of misbehavior. Desks must be arranged so the teacher has quick and easy access to all parts of the room.

Touch

If the teacher's physical presence has not been sufficient in itself, a hand gently resting on the student's shoulder may help to accentuate the point. Likewise, while the teacher is passing by, a tap on the shoulder may redirect a student to work. (In the lower grades, teacher touch can also convey warmth and caring, but not all students like to have physical contact and older students may resent it as they try to establish their independence from adults.) If the incident has begun to escalate, teacher touch may serve to irritate the student.

Minimal Verbal

Low-key responses are generally non-verbal but several minimal verbal responses can still be regarded as "low-key." The insertion of the student's name in the middle of the sentence, can alert the student that the teacher is well aware of his behavior.

> "The reasons for the formation of that coalition, Eddie, are outlined in today's lesson."

A more pointed message is sent, after pausing for a moment, when the teacher quietly says the student's name.

> "Eddie."

If the student has been inattentive and day dreaming, hearing his name will jolt him to attention. Often, he has not heard the question and this is embarrassing. As Good and Brophy (1978) suggest, a kinder way is to call the student's name first and then pose a question the student can answer successfully.

Perhaps a bit more direction is needed and a brief "rule reminder" or a clear specification of the desired behavior may be provided.

> "Your feet under your desk, please."
>
> "Completed work is to be placed in the green basket, please."
>
> (The modeling of "Please" and "Thank you", delivered in a pleasant tone, is always desirable.)

Private Dialogue

Holding a necessary conversation privately with a student saves him embarrassment in front of peers in public, and reduces his need to "save face." Bending over the student and lowering the voice or taking the student to a quieter place in the room affords privacy and keeps the focus on solving the problem and not on playing to an interested audience.

Concurrent Praise

In the younger grades this technique works well. The teacher praises someone who is exhibiting the correct behavior. "Colleen's row is all ready with pencils and paper out," or, "Thank you for remembering to ask me before ____________." Older students who are singled out like this become embarrassed and will surely be teased by classmates. (Praise should be delivered privately).

Problem Versus the Student

This is not so much a low-key behavior as it is good advice. Restrict remarks to the behavior under discussion and how it is to be changed rather than on personality deficiencies in the student.

Students see that the teacher who consistently uses low-key techniques is intent on keeping their attention on instruction and will wait for them to get back in line. This simply reinforces their belief that this teacher is "with it" enough to notice and holds them accountable in a variety of ways.

Change Activities

Another suggestion by Cummings is that the teacher switch to "active participation" by requiring that all students vote 'yes' or 'no' with hand signals, write down 6 points as the teacher circulates, or answer verbally. This serves to discourage any off-task behavior which has been going on.

Video - Low-Key Responses

Watch the description of Low-Key Responses (VHS 0447) then watch Illustrations A, B, C, D, E, F, G, H, and I (VHS 0488-0750). These nine illustrations include various methods of using low key responses to student inattention and misbehavior.

With our camera crew in the room, students tended to be on their best behavior. Consequently, a few of these incidents were staged so the teacher could demonstrate low key techniques.

3/4" 393
VHS 0488
Yours ____________

Illustration A - Grade 2/3, Language Arts

Heather (a) uses a gesture to remind a student across the room that he should be working, and (b) gets the full attention of her grade Two group before starting her next lesson with them. She asks for 10 empty fingers - she zips her mouth closed a few times to request silence, and has to name two students. As she begins her directions notice a pause and a pointed look before she resumes giving the directions.

3/4" 413
VHS 0515
Yours ____________

Illustration B - Grade 12, Math

After three late students enter the room and sit down there is still some noise. Marilyn says "Come on guys, cool it" and then continues on with instruction.

3/4" 423
VHS 0528
Yours ____________

Illustration C - Grade 8, Science

As Ric hands back quiz papers, (a) two girls are giggling. He asks if there is a problem and states that he would like to get back to work. He asks if they are finished and gets a commitment from each girl, then (b) notices a boy reading a book. He leans down, stares, and shuts the book.

3/4" 448
VHS 0562
Yours ____________

Illustration D - Grade 1, Math

Teacher has handed out yellow cards which show the numbers in order (1-100). As students answer questions like, "What number comes after X?" a boy tosses his card, like a frisbee, across the room. Helen stops and stares and the boy quickly retrieves the card and sits down.

3/4" 456
VHS 0574
Yours ______

Illustration E - Grade 11, Biology

In the middle of a discussion the teacher asks a student to "think about it" - hearing too much chatter Peter whistles for attention.

3/4" 461
VHS 0579
Yours ______

Illustration F - Grade 8, Arts

A boy has been argumentative since entering the class. Ron takes him aside and asks what is wrong. Something happened out of class. They decide the student should change seats and come up to the front. The teacher relocates him and finds him a flower to draw.

3/4" 482
VHS 0608
Yours ______

Illustration G - Grade 1, Math

Just after recess, Helen is beginning her math. class with a question. A girl dumps sand out of her shoe and the teacher directs her to do this up by the garbage can. The teacher resumes asking her question.

3/4" 487
VHS 0615
Yours ______

Illustration H - Grade 9, Social Studies

A boy continues to misbehave throughout the lesson so that Ron:

(a) notices the pencil-tapping, pauses until it stops and then says, "Thank you";
(b) again reminds the student to behave by saying, "Mike, please";
(c) after the next minor incident says, "Mike, settle down";
(d) since the student is rattling papers, stares and says, "Mike, please".
(e) The fifth intervention occurs when the teacher approaches the student and apparently asks him to leave the room until he can behave appropriately. The student leaves. After a minute, the door opens and the teacher asks him, "Are you ready to participate properly?" The student indicates he is, and sits in his seat.

3/4" 522
VHS 0662
Yours ______

Illustration I - Grade 2/3, Language Arts

Heather is supervising the oral reading of the story, "Zama's Talking Bird." While she circulates around the room monitoring student behavior, she provides verbal feedback to each student who has a turn reading aloud. Watch how busy she is pointing out the place in several students' books and gathering up pencils from a desk, while she continues to assist the student with pronouncing the words correctly.

Instrumentation

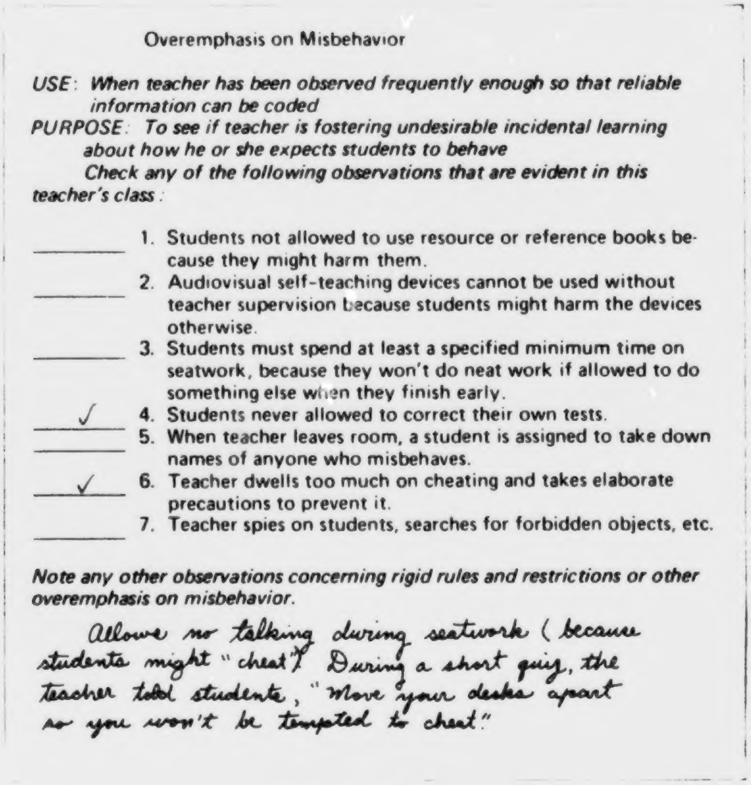
Teacher gives students non-verbal cues.

1 Low	2	3 Med	4	5 High	Not Observed

Notes

- encourages desirable behavior with facial expression and gesture
- discourages undesirable behavior with facial expression and gesture
- uses proximity to raise accountability
- uses silence - breaks off a sentence in the middle - until behavior becomes appropriate.

(Adapted from MacCannell and Young, 1980).



Overemphasis on Misbehavior

USE: When teacher has been observed frequently enough so that reliable information can be coded

PURPOSE: To see if teacher is fostering undesirable incidental learning about how he or she expects students to behave

Check any of the following observations that are evident in this teacher's class:

_____ 1. Students not allowed to use resource or reference books because they might harm them.

_____ 2. Audiovisual self-teaching devices cannot be used without teacher supervision because students might harm the devices otherwise.

_____ 3. Students must spend at least a specified minimum time on seatwork, because they won't do neat work if allowed to do something else when they finish early.

__✓__ 4. Students never allowed to correct their own tests.

_____ 5. When teacher leaves room, a student is assigned to take down names of anyone who misbehaves.

__✓__ 6. Teacher dwells too much on cheating and takes elaborate precautions to prevent it.

_____ 7. Teacher spies on students, searches for forbidden objects, etc.

Note any other observations concerning rigid rules and restrictions or other overemphasis on misbehavior.

Allows no talking during seatwork (because students might "cheat"). During a short quiz, the teacher told students, "Move your desks apart so you won't be tempted to cheat."

Looking in Classrooms - Second Edition. Thomas L. Good and Jere E. Brophy, New York: Harper & Row, Publishers. 1978. page 159

Teacher's Reaction to Inattention and Misbehavior

USE: When the teacher is faced with problems of inattention or misbehavior
PURPOSE: To see if teacher handles these situations appropriately

Code the following information concerning teacher's response to misbehavior or to inattentiveness. Code only when teacher seems to be aware of the problem; do not code minor problems that teacher doesn't even notice.

BEHAVIOR CATEGORIES

A. TYPE OF SITUATION
1. Total class, lesson or discussion
2. Small group activity—problem in group
3. Small group activity—problem out of group
4. Seatwork checking or study period
5. Other (specify)

B. TYPE OF MISBEHAVIOR
1. Brief, nondisruptive, should be ignored
2. Minor, but extended or repeated. Should be stopped nondisruptively
3. Disruptive, should be stopped quickly. No questions needed
4. Disruptive, questions needed or advisable
5. Other (specify)

C. TEACHER'S RESPONSE(S)
1. Ignores (deliberately)
2. Nonverbal; uses eye contact, gestures or touch, or moves near offender
3. Praises someone else's good behavior
4. Calls offender's name; calls for attention or work; gives rule reminder. No overdwelling
5. Overdwells on misbehavior, nags
6. Asks rhetorical or meaningless questions
7. Asks appropriate questions—investigates publicly
8. Investigates privately, now or later
9. Threatens punishment if behavior is repeated
10. Punishes (note type)
11. Other (specify)

CODES

	A	*B*	*C*
1.	3	3	4
2.	3	3	4,6
3.	1	2	2
4.	1	3	4
5.	4	3	2
6.	__	__	__
7.	__	__	__
8.	__	__	__
9.	__	__	__
10.	__	__	__
11.	__	__	__
12.	__	__	__
13.	__	__	__
14.	__	__	__
15.	__	__	__
16.	__	__	__
17.	__	__	__
18.	__	__	__
19.	__	__	__
20.	__	__	__
21.	__	__	__
22.	__	__	__
23.	__	__	__
24.	__	__	__
25.	__	__	__

CHECK IF APPLICABLE

________ 1. Teacher delays too long before acting, so problems escalate
________ 2. Teacher identifies wrong student or fails to include all involved
________ 3. Teacher fails to specify appropriate behavior (when this is not clear)
________ 4. Teacher fails to specify rationale behind demands (when this is not clear)
________ 5. Teacher attributes misbehavior to ill will, evil motives
________ 6. Teacher describes misbehavior as a typical or unchangeable trait; labels student

NOTES:
#1, 2, and 4 were all for student #12 (he seems to be the only consistent problem as far as management goes).

Looking in Classrooms - Second Edition. Thomas L. Good and Jere E. Brophy, New York: Harper & Row, Publishers. 1978. page 245

CASE STUDY, part 1/2

USE: To do concentrated observations on one or a few students who are problems for the teacher

PURPOSE: To systematically gather information needed to understand the student's behavior and to make recommendations to the teacher

Use the codes on this page to record the student's behavior and link it to antecedent causes when possible.

A. STUDENT BEHAVIOR

1. Pays attention or actively works at assignment
2. Stares in space or closes eyes
3. Fidgets, taps, amuses self
4. Distracts others–entertains, jokes
5. Distracts others–questions, seeks help, investigates
6. Distracts others–attacks or teases
7. Leaves seat–goes to teacher
8. Leaves seat–wanders, runs, plays
9. Leaves seat–does approved action (what?)
10. Leaves seat–does forbidden action (what?)
11. Calls out answer
12. Calls out irrelevant comment (what?)
13. Calls out comment about teacher (what?)
14. Calls out comment about classmate (what?)
15. Deliberately causes disruption
16. Destroys property (whose? what?)
17. Leaves room without permission
18. Other (specify)

B. APPARENT CAUSE

What set off the behavior?

1. No observable cause–suddenly began acting out
2. Appeared stumped by work, gave up
3. Finished work, had nothing to do
4. Distracted by classmate (who?)
5. Asked to respond or perform by teacher
6. Teacher checks or asks about progress on assigned work
7. Teacher calls for attention or return to work
8. Teacher praise (for what?)
9. Teacher criticism (for what?)
10. Teacher praises or rewards another student
11. Teacher criticizes or punishes another student
12. Teacher refuses or delays permission request
13. Other (specify)

NOTES:

9:45 Recess.

TIME		CODES	
		A	B
8:15	1.	1	
8:23	2.	6	1
8:24	3.	1	
8:29	4.	11	10
8:30	5.	1	
8:38	6.	6	4
8:40	7.	1	
8:47	8.	2	2
8:49	9.	1	7
8:51	10.	5	2
8:53	11.	1	6
9:00	12.	9	
9:27	13.	15	1
9:28	14.	1	9
9:34	15.	6	1
9:36	16.	1	7
9:45	17.	9	
:	18.		
:	19.		
:	20.		
:	21.		
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:	32.		
:	33.		
:	34.		
:	35.		
:	36.		
:	37.		
:	38.		
:	39.		
:	40.		

Looking in Classrooms - Second Edition. Thomas L. Good and Jere E. Brophy, New York: Harper & Row, Publishers. 1978. page 246

Note any information relevant to the following points:

CASE STUDY, part 2/2

STUDENT'S EMOTIONAL RESPONSE

1. Complaints (He is disliked, picked on, left out, not getting share, unjustly blamed, ridiculed, asked to do what he can't do or he's already done):

2. Posturing Behavior (threats, obscenities, challenging or denying teacher's authority):

3. Defense Mechanisms (silence, pouting, mocking politeness or agreement, appears ashamed or angry, talks back or laughs, says "I don't care," rationalizes, blames others, tries to cajole or change subject)

   Grins while being "talked to", blames student #7 ("He hit me first")

Check if applicable:

✓ 1. Teacher tends to overreact to student's misbehavior
___ 2. Student's misbehavior usually ultimately leads to affection or reward from the teacher
___ 3. Student usually acts out for no apparent reason
✓ 4. Student usually acts out when idle or unable to do assignments
___ 5. Student usually acts out when distracted by another child
___ 6. Student usually acts out in response to the teacher's behavior.

POSITIVE BEHAVIOR

1. Note the student's changes in behavior over time. When is he most attentive? What topics or situations seem to interest him?

   Attentive throughout reading group.

2. What questions does he raise his hand to answer?

   Seeks to respond in all situations – whenever he thinks he can answer.

3. What work assignments does he diligently try to do well?

4. What activities does he select if given a choice?

Looking in Classrooms - Second Edition. Thomas L. Good and Jere E. Brophy, New York: Harper & Row, Publishers. 1978. page 247

STRONGER RESPONSES TO STUDENT MISBEHAVIOR

If low key responses have not been effective in extinguishing misbehavior then the teacher must "bump up" the reaction to match the student behavior. As mentioned before, discussions after class with the student, and perhaps with his parents, may become necessary. If behavior needs to be modified, an elaborate plan for monitoring and rewarding progress over time could be drawn up.

A "contract" then specifies the consequences and rewards for the student as he works to correct the problem. Sometimes the problem may just suddenly flare up, pitting the student against the teacher in a battle of wills.

The Power Struggle

On occasion a teacher and student find themselves engaged in a power struggle. At its worst it occurs in front of an audience of student peers who are watching to see who will "win". In tape 2-2, Glen Haug demonstrates some techniques that may be used by the teacher. Ten scenarios were role-played with high school students.

The trick is to remain emotionally uninvolved, which is difficult when your authority is being challenged in front of the class. While you are sizing up the situation and figuring out what to do, buy some time by looking calm and taking several long deep breaths while maintaining eye contact with the student. Pauses make the student nervous and the lack of verbal response makes it difficult for him to use it as ammunition as he answers the teacher back. When you do speak, use words sparingly and state the facts (that the student is refusing to do ____) and then give the problem to the student by asking what will happen next. "Will you cooperate and write the test?" Laying blame and criticizing personalities will not bring an end to the situation. The aim is to resume teaching as quickly as possible (not to win at all costs). A compromise, if possible, "saves face" for both parties. Sometimes the student must be made to comply, and may even be removed from the class if he still refuses to cooperate.

Even if the teacher has not lost his cool and has brought the situation to a successful resolution, these events take their toll on classroom climate. One needs about a half hour to calm down after becoming very upset. Other students who were not involved will have been affected as well.

While some of these set-to's cannot be avoided, the effective teacher can sense one coming and can side step the bait and not become involved. Using humor to defuse a potentially troublesome encounter is a powerful skill. Sometimes it is best to ignore the bait but if the teacher cannot avoid participating in a power struggle then the key things to focus on are not getting emotionally involved, resuming instruction as quickly as possible, and concentrating on using the series of techniques which will help to bring the situation to a hasty resolution.

In tape 2-2, the introduction outlines the steps to try and follow in order to end the power struggle. Then Glen and the students perform the following role plays:

- The Exam - A
- The Exam - B
- Hamlet
- The Late Slip
- Makeup - A
- Makeup - B
- Makeup Humor
- Gum

The Note - A
The Note - B

You probably will not need to use all ten scenarios if you are introducing this in a group setting. Preview them and select the two or three you feel work the best. The writer decided to include all ten as resources for you - the user of the inservice kit.

CHAPTER TWO - MODULE FOUR

CIRCULATING, MONITORING

(Teacher's Awareness, Concurrent Tasks Management, Classroom Problem Management, Feedback To Pupils, Time On Task, Praise And Encouragement/Criticism, Individualization Of Instruction)

> **"Teachers should move around the room, monitor pupils' seatwork and communicate to the pupils an awareness of their behavior, while also attending to their academic needs."**

Circulating

Moving around the room allows the teacher to reach a level of awareness not possible otherwise. Certain lessons restrict teacher movement by requiring the teacher to record brainstormed answers on the blackboard or to guide the class through a math problem by working on the overhead projector. These situations, which keep the teacher stationary, make it more difficult for the teacher to be aware of what is happening in the classroom.

Usually it is possible for the teacher to "work the crowd" while instructing. The arrangement of furniture should facilitate easy access to all parts of the room. Students get used to hearing the teacher's voice from various locations and they come to expect teacher movement during a lesson. While on the prowl, it is relatively easy for the teacher to remove an item from a student, tap a student on the shoulder to regain attention, make eye contact, deliver non-verbal messages, make personalized comments, give academic feedback, and provide individual assistance. There is so much to recommend this teacher behavior of circulating around the room frequently, if combined with preventative actions, low-key techniques in response to student behaviors, and support and encouragement for students.

An Ounce of Prevention

In the preventative sense, constant teacher movement serves to discourage a good deal of misbehavior, for the odds of getting caught in the act are very high.

The teacher who moves around communicates a serious interest in maintaining an on-task and businesslike orientation to school work. Meaningful looks convey that the teacher is well aware of how students are behaving and of how much work they have to finish. The accountability is high. By monitoring progress and gauging how much time the student is taking to complete the work, the teacher can judge whether the working pace and effort are acceptable and also whether the level of difficulty is appropriate. Students have a healthy respect for a teacher who is aware of behavior and progress and who makes herself available for individual help.

Academic Feedback

The main purpose of circulating around the room while students work independently is to provide advice and assistance and to keep track of how quickly and accurately students are performing the assigned tasks. Providing Knowledge of Results to students answers their question "How am I doing?" Useful teacher academic feedback is immediate and specific. The student can quickly correct mistakes and prevent more if the teacher intervenes while he is doing assigned seatwork. This is useful feedback to the teacher too, for if a great number of students are experiencing similar problems, there is a good chance that the lesson lacked clarity or needed more explanation and examples. Collecting this information and immediately reacting to it by re-teaching the lesson is preferable to marking 25 sets of answers -only to find that students have been practising errors instead of solidifying the intended learning.

Praise and Encouragement

While walking around helping students it is an opportune time to notice improvements in accuracy, neatness, handwriting, tidy desk., etc., and to say so. We all like to get recognition for effort expended and if given privately, encouragement can be particularly motivating. It is most useful for the uncertain student to know that he is performing the assigned task correctly and teacher support and encouragement leads to an even better effort.

In Personal Touch

It is on those occasions when students are working independently and the teacher is circulating to provide help and assistance, that rapport-building can occur. It is easy to check on how yesterday's football game went or how everyone at home is adjusting to the new baby/dog/car. This shows the student the teacher has personal knowledge about him and cares what happens to him. Those students who need close contact may get their hair tousled or a quick pat on the back, if this is appropriate. These are private, meaningful exchanges between teacher and student and they contribute to overall climate and morale.

With One Stone

Monitoring involves several teacher behaviors concurrently and, therefore, is one of the more important teaching skills. To summarize, the teacher keeps on top of things by circulating frequently. Low key corrections are easily made for inappropriate or off-task behavior. Praise and encouragement can be provided and private, personal exchanges can occur. Most importantly, the teacher takes a reading of how well the lesson was presented for, presumably, the seatwork is a practice extension of the lesson, and requires students to demonstrate an internalization of the learning. In addition to providing feedback to the teacher, monitoring or circulating behavior affords specific and immediate feedback to the student as he completes the assigned tasks independently.

You may wish to track teacher movement around the room by drawing a floor plan of the classroom (see maps, pages 4-10, 4-11, 4-12) and literally tracing the teacher's steps. Having tired feet is an occupational hazard but is also a good sign that the day has been spent keeping close track of students and their use of academic learning time.

Video - Circulating, Monitoring

Please watch the description of teaching monitoring (tape 2-1 - VHS 0750) and then watch illustrations A, B, C, D, E, F, and G (VHS 0777-0951).

3/4" 605
VHS 0777
Yours ____________

Illustration A - Grade 12, Math

Marilyn circulates to help students with assigned math work. "That's good. What are you going to do with it - add, subtract?" She checks with a boy who has an error and urges him to look at the diagram which will help him to think through the problem.

3/4" 623
VHS 0803
Yours ____________

Illustration B - Grade 1, Math

Helen helps a student identify the number that comes between 71 and 73. (She whispers the name of a student who is off task.) She gets the student to point to her number card to find the answer and then fill in the missing number on her math worksheet.

3/4" 633
VHS 0818
Yours ____________

Illustration C - Grade 10, French

Students are completing seatwork exercises using the passé composé verb tense. Denise circulates offering praise and specific assistance in getting the answers correct.

3/4" 653
VHS 0845
Yours ____________

Illustration D - Grade 12, Math

Ted provides individual help as students work on math problems. "Is it possible to have a length of negative one? No. There's another check there. Everything has to be positive." He bends down to help a girl. "Root 27 - write it as a mixed radical 3 root 3. The next one is root 20." He helps the next girl. "The square root of 27. Convention says you break it down . . . Are you trying to do them in your head? Do the steps."

3/4" 673
VHS 0875
Yours ____________

Illustration E - Grade 1, Math

Students have various tasks to finish before lunch. Faye places a priority on completing the math worksheet and then finishing up a diary if there is time. While circulating she notices some marbles on a desk which belong in the student's shelf at the side.

3/4" 688
VHS 0894
Illustration F - Grade 8, Art Yours ____

Ron gives specific assistance to students who are drawing flowers. "You'll find if you take short strokes . . . Keep in mind there's quite a curve to it . . . You've done it there . . . You're not doing it here." He relocates and helps other students. "It's dark and light - not all one."

3/4" 699
VHS 0910
Illustration G - Grade 7, Art Yours ____

As he circulates, Merv models a calligraphy letter on each student's practice sheet. He comments on their efforts "Those are nice, look good." He goes to another student. "Oh, you're getting too high - start at 8. That one was right. Keep them lower. Always start at the 8 mark . . . Don't worry about that part but this one is the key." Thus he provides them with specific knowledge of results as they work along.

Instrumentation

Teacher evaluates children's work during the lesson.

1 Low	2	3 Med	4	5 High	Not Observed

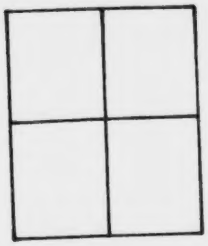
Notes

- reteaches part of the lesson as needed.
- gives knowledge of results as student works.
- attends to special needs of individuals.
- observes children's seatwork or work at the blackboard.

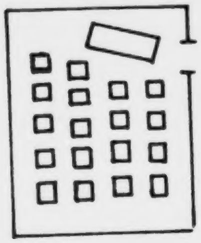
(Adapted from MacCannell and Young, 1980)

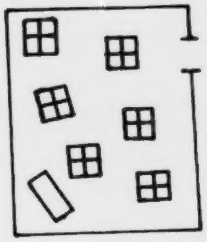
Use of a Classroom Map

As in Chapter Four (see pages 4-10, 4-11, and 4-12) the classroom map can be used to collect information about the teacher's movement around the classroom. As the teacher circulates, plot the path by marking it on the map. By studying the map you can help to determine whether some students are receiving little contact, whether the arrangement of furniture prevents the teacher from moving to all parts of the room, or whether the teacher is too stationary in one part of the room.



Room in quadrants





Chapter Three

Instructional Skills

CHAPTER THREE

INSTRUCTIONAL SKILLS

INTRODUCTION

The teaching strategies included in this module are representative of teaching behaviors that help to ensure the successful delivery of instruction. In general, these skills deal with organizational aspects of instruction such as direction-giving, sequencing of instruction, clarifying, varying the presentation of lessons, and optimizing student engaged time. The behaviors have been chosen because research studies continue to substantiate their positive links with student achievement. At best the links are correlational, not causal, but the practical wisdom of teachers and supervisors supports the belief that these behaviors do serve as indicators of effective teaching. This set of teaching skills follows those considered to be more "managerial" (in Chapter Two), and this underscores the belief that unless the teacher utilizes good classroom management skills, the instructional capabilities of the teacher will not be exhibited to any advantage.

Information about each of these instructional skills has been derived from a variety of sources - in particular, reviews of the literature; the work of Madeline Hunter, Benjamin Bloom, Jere Brophy, Tom Good, components of Teacher Effectiveness Programs and descriptions of findings from classroom observational research studies. These studies afforded a composite picture of what the skill might look like in practice, given the age and type of student, the subject area under study, and the teacher's intent. The conclusion is that these skills are very "situational" and their use should depend on the factors mentioned above.

Teachers should be skilled in using the techniques but it may not be appropriate to use them unless conditions are favorable. The teacher must have a variety of skill options available upon which to draw. However, the most important teaching skill is decision-making -meaning the matching of instructional skills to particular teaching situations. Knowing when to use an instructional skill and how best to implement it is where true teaching skill is exhibited. This presumes the teacher has a full repertoire of skills. Each skill can be used in a variety of ways once it is selected for use. The teacher has to know the rationale behind its use, the options of what to do and say when employing the technique, and the probable effects it will have on students. The teacher who displays a wide range of techniques and who alters these when working with individuals displays flexibility, which is a key teaching attribute. Knowledge of student learning styles and personal needs allow the teacher to tailor techniques to suit the students.

In like fashion, your data collection procedures must take background factors into consideration or you may end up looking for behaviors that the teacher could demonstrate but does not choose to because they do not suit the purpose of the lesson you are observing or the requirements of students. By broadening the list of behaviors you are watching for, you have the flexibility to narrow your observational focus to those teaching strategies that could be used to good advantage. Through prior agreement with the teacher, you can observe for skills of specific interest to you and that would best suit a particular lesson.

Our collection of instructional skills will not be complete, of course, but it will provide descriptions of a variety of instructional behaviors from which you can choose your focus for observation. The potential danger of adopting a "standard" coding form in your district with only a few options specifically described is that you may penalize teachers who adopt other teaching practices that work equally well and that demonstrate a flexible and responsive approach to teaching. Knowing the teacher's purpose in advance of your observation will help you to select a focus, and the teacher can then concentrate on exhibiting expertise in a given area and you can be watching for it. Otherwise, you will be applying rules of baseball to a volleyball game and judging the quality of the game accordingly.

Purpose of the Module

Some of these instructional skills have an obvious overlap with classroom management skills. Most of the skills we are watching for are used interdependently and it is precisely in this mix of skills that a teacher's expertise is anchored. For the expedience and convenience of labelling and discussing aspects of teacher behavior, we may make rather arbitrary separations between behaviors. This procedure allows us to develop a vocabulary with which to scrutinize each behavior individually, and to work together at an observation task. Our intent is not to promote an atomistic, mechanistic approach for the observation of teaching. Effective teaching is the integration of many skills in a mix that suits the instructional setting.

In order to recognize excellence in teaching one must be able to appreciate the many small skills that are combined - (much as steps in ballet or figure skating). These must be individually mastered in order to be integrated, along with some imagination, into a dance sequence of quality. The entire sequence can be appreciated or individual portions can be closely examined.

The purpose of Chapter Three, in brief, is to sharpen our observation of instructional skills that organize the class for instruction and that maximize the use of learning time. The ways in which a teacher interests and motivates students and demonstrates a flexibility in the use of teaching approaches are also important focal points for our observations and analyses in this module.

The first behavior in the module is the teacher's ability to minimize class time spent on organizational activities so that more time can be devoted to instructional pursuits.

Video Instructional Skills

There are two video tapes (Tape 3-1 - Accession Number ________ and Tape 3-2 Accession Number ________) in Chapter Three. The master tapes are 3/4" cassettes but they were dubbed onto VHS so numbers corresponding to that machine have been included. The overview of Chapter Three is at the beginning of the tape 3-1 (VHS 0019).

CHAPTER THREE - MODULE ONE

PLANNING (3-1)

(Plans, Organization and Implementation)

> **"Teachers should plan their classroom activities on a regular basis."**

Best Laid Plans

One of the most important teacher behaviors is planning for instruction. Many decisions have to be made. Assuming the teacher has good diagnostic skills and has chosen suitable content that matches the ability and interests of the learners, the teacher needs to organize the content to fit the time available and the purpose for learning.

The first stage of the planning job is deciding what content can be covered during the year (long-range plans), one month, one week, and for today's lesson. The teacher must have year-long aims and objectives that provide direction for weekly decisions and daily plans.

The teacher plans today's lesson by formulating a purpose for learning that can be stated clearly. The teacher conducts a task analysis by considering all components of the learning and determining whether there is a dependent sequence that will require a particular order of presentation. Given that the lesson is only 40 minutes long, some activities, which are at least "related" to the objective and would be interesting, will have to be rejected in favor of other components more in line (relevant) with the lesson's main objective. Further decisions have to be made:

What supplies will be needed?
Is there a transition within the lesson?
How can questions be formulated?
Will the curriculum have to be adjusted to suit particular students?
How will the lesson be introduced and summarized?

A plan should function as a "game plan" that may have to be abandoned if things do not work out. Without a plan, the lesson could meander through a series of activities that are merely interesting but do not accomplish the objective set. Without an objective, the lesson is even more adrift, with no particular destination in mind.

Assuming there is a clearly defined objective and a planned structure for the lesson, the teacher must determine when any transitions will occur and how they will be effected quickly. This includes planning the set of directions required by students and making the materials accessible.

If questions will play a major role in the lesson, it is vital that questions are ordered and structured in advance so the teacher will not be asking them "off the cuff." Exact wording of questions will influence the quality of student answers and should be written down. If there are plans for distributing response opportunities to students how will they be implemented?

Some teachers are able to plan without writing things down but most of us find writing plans a useful practice. Observers have always believed that a written set of plans indicates that some forethought has gone into the lesson. Ask the teacher to save samples for you (plans, worksheets) - perhaps in a folder - and just add to it throughout the year.

By working through the stages in the lesson during careful pre-lesson planning, it is possible to anticipate where problems may occur and to circumvent these in advance. Fewer things go wrong and the teacher feels in control of events when time has been devoted to planning for instruction. This practice allows the teacher to conduct the classroom in a business-like way and to maintain the focus on the objective, thus maximizing academic learning time. Two questions then are "Can this teacher plan?" and "Can he work the plan?"

Video - Planning

A description of planning and several of the teacher behaviors included therein is presented in Tape 3-1 (VHS-0054). The video illustrations are included under the eight elements of Lesson Design which is presented next.

LESSON DESIGN (3-1)

In the Teacher Effectiveness Program we use Madeline Hunter's suggestions for lesson design. Basically lesson design is a "set of processes that when used together can be put into any lesson to increase the chances that students will learn. Hunter refers to the seven elements (we include "closure", making eight) as a "basic white sauce recipe." One decides whether to use salt or not. If the sauce is going over ham, leave out the salt.

In the planning stage it makes good sense to consider all eight elements. If it suits the purpose of the lesson include them. It is sometimes difficult to separate the elements for analysis. For example, the objective may be shared as part of the set, and modelling may occur during the input stage. But for our purposes here, we will try to identify the individual parts. We have to remind ourselves that including these elements is a means to an end (teaching a great lesson) and should not become an end in itself. Even with all the parts there (mechanically), a lesson may fall short of the mark. . . .Think of our figure skater who can perform all the individual steps in a technically perfect, but uninspiring performance.

Anticipatory Set (3-1a)

Set is intended to focus the student on the learning. It may contain all of the following characterisitcs:

- links to past experiences. "Remember last year when you did long division"; or "yesterday, we learned which organs produce body wastes."
- forces the student to think actively. "Think for a moment about the steps involved in planning a lesson" or "By a show of hands, left or right, tell me which of these two answers is correct."
- is relevant to the new learning. Not only must the set "motivate" students and interest them but it must have a very direct connection with the new learning.

Sometimes, instead of standing on its own, the objective and purpose is combined at this stage. The important thing is that the student receives the information and we will be able to recognize that the elements of lesson design are there.

Video - Anticipatory Set

A brief description (VHS-0114) precedes the four video examples chosen as illustrations (VHS 0151 - 0465).

3/4" 138
VHS 0151
Yours ________

Illustration A - Grade 5/6, Language Arts

Jim reminds his students that they have been doing a number of specific types of stories. The next type they will be studying is a mystery story. He has given them a sheet of information which he would like them to skim in order to pick out some key elements of mystery stories.

3/4" 150
VHS 0167
Yours ________

Illustration B - Grade 1, Math

Faye asks her class whether they "Remember the other day when we were doing counting?" She asks a student to begin counting to 100 for her. She asks another student to continue. Next she asks a student to count by five's, and another student to count by two's. As they finish, she claims she has five numbers written in order on the chalkboard. Her students tell her the numbers are not in order and Virginia comes to the chalkboard to write them in order for her.

3/4" 231
VHS 0269
Yours ______

Illustration C - Grade 9, Social Studies

Ron quizzes his students about the previous day's lesson on Russian history. He asks them about Ivan the Terrible and the Black Riders. He tells them an additional story about Ivan the Terrible. He ends the questioning by saying he was glad to have had the chance to do a small review. He now moves on to the next ruler, Peter the Great. He announces that he has done a "strange thing to help you remember why Peter was so great."

3/4" 280
VHS 0333
Yours ______

Illustration D - Grade 7, Science

Merv begins his class with a quiz, then he plans to talk about the ways our bodies eliminate waste, and then they will do exercises from pages 113-118. All students are to answer the quiz question by indicating, with hand signals, whether the answers are true or false. "Think about the work we covered yesterday . . . Question number two - Rusting is a kind of oxidation; true or false" . . . later, still as part of his set for today's lesson . . . Merv states that his purpose is "during this period to be able to name four main organs used in the excretory system. Also, we want to know the ways cells create waste and how this is eliminated. Before that I'd like you to think about this. Picture in your mind what the city would look like if the garbage man did not come to pick up wastes . . . If we did not have a sewer system . . . If the fireplace was never cleaned out . . . The same applies to our human body."

Sharing Objective and Purpose (3-1b)

By stating the purpose for the lesson, the teacher lets students know what they will learn and how they will show they have learned it. Also, the teacher lets students know why they should learn this and how this information fits into their goals and why it is important. The statement of purpose is normally made at the beginning of the lesson unless the teacher intentionally withholds it, for a time, to develop a need by students for such a purpose. For example, a science experiment may require the students to wrestle with the problem for a while, in the inquiry mode, until it is obvious that a direction needs to be set.

Video - Sharing Objective and Purpose

A description of this behavior is provided on Tape 3-1 (VHS 0465) and is followed by four videotaped illustrations (VHS 0480 - 0609).

3/4" 392
VHS 0480
Illustration A - Grade 11, Biology Yours ______

Peter outlines that he quickly plans to go through some background information with students which may be of value to them when they do their lab write up. He will then give them information on the species diversity index and will later let them calculate this SDI.

3/4" 405
VHS 0497
Illustration B - Grade 7, Art Yours ______

Merv announces that by the end of the period they will know how to make the letters G, H, I, and J. He hopes they have names starting with these letters so they will have a good reason to learn them. "I'll put an example on the chalkboard. I want everyone to watch. I'll come around. Make 4 or 5 copies of the letter and a name to go with it." Before he shows them the first letter he reviews a few particulars about the use of the lines and the spacing required.

3/4" 444
VHS 0550
Illustration C - Grade 8, Art Yours ______

Ron announces that he has an unusual art lesson planned for today - which will be timed by how long his flowers last. (They are partly wilted) "This is what I would like you to do today. First I will show you art prints . . . the way the masters handled flowers . . . This is the essence of what I'll ask you to do today - to handle flowers in a loose manner. Keep the lines loose." First, he intends to illustrate how the masters did this, then how fellow students did this in drawings, and then he will give them the flowers and ask them to draw them.

3/4" 472

VHS 0586

Yours ______

Illustration D - Grade 12, Math

Ted asks his students to work on six questions, finding the lengths between two points. He asks them to do it on graph paper. For each question, he wants them to do it graphically and secondly, to do the calculation and then to turn the questions in to him. Although they have done number one together he asks them to copy it so they will have a model. The objective is to be able to find the absolute value and to apply this information to a new situation.

Instrumentation

Teacher shares the purpose of teaching the lesson

1	2	3	4	5	Not Observed
Low		Med		High	

Notes

Indicators

- states clearly what (s)he expects the lesson to accomplish
- specifies objectives in terms of what students learn
- is specific - "will learn more about multiplying by using a 2 digit number to multiply"
- "will learn how to weigh fruit using kg. and g."
- states the purpose at the beginning of the lesson

(Adapted from MacCannell and Young, 1980.)

Input (3-1c)

During the "input" phase of the lesson, the teacher gives the students the information they need and indicates what methods and materials will be used. Input can be transmitted by using books, filmstrips, records, diagrams, pictures as well as through activities or by the teacher's explanation.

Video - Input

A brief description of input is presented in Tape 3-1 (VHS 0609) followed by three videotaped examples (VHS 0616 - 0766).

3/4" 494
VHS 0616
Illustration A - Grade 11, Biology Yours ____________

Marilyn is distinguishing between permutations and combinations, "Supposing we were going to elect a president, vice-president, and secretary from the 25 of you. There would be 25 choices for the first, 24 choices for the second and 23 choices for secretary. The difference between that and a combination is that we don't care which one is in which position . . . If we sent three people on a suicide mission . . . If we had Sharon, Cathy, and Laurie. . . When we do a permutation, Laurie, Sharon, and Cathy would be counted as a second group. . . you would need to divide. . ."

3/4" 539
VHS 0678
Illustration B - Grade 8, Art Yours ____________

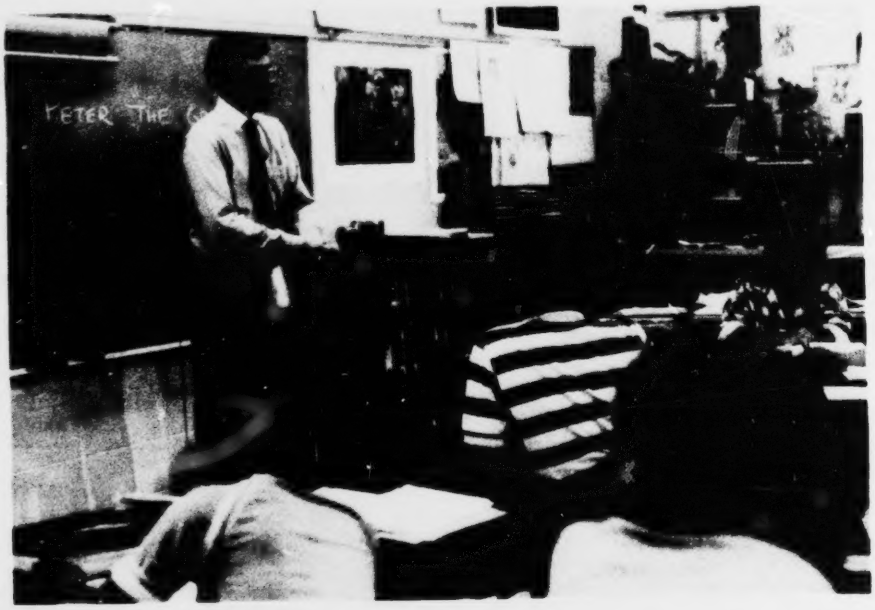
Ron points out the first painting, done by Monet. "There is detail in the petals. Each stroke is applied liberally. Some I have seen in Paris, the paint was put on ¼" thick. Monet is not as thick as Van Gogh. Notice each stroke has blends of color. You will use black and white. . . can decrease and increase the weight of the pencil to make it work. This second painting is traditional as well - you can't make out the petals - not certain whether they are irises. . . . The next one I'll ask you to describe. Gather your thoughts. How would you handle it? A hard question. Would you use sweeping strokes?"

3/4" 572
VHS 0723
Illustration C - Grade 8, Science Yours ____________

Ric is reviewing science with his students, getting them ready to write their final exam. He asks what a magnotometer is. "Rocks with iron in them give off a different signal under pressure." Rick tells them that by measuring these changes, scientists can tell whether it will be a big or small eruption. He makes sure they know what the Richter Scale and Tiltmeter are. He uses a diagram to help explain how the tiltmeter functions.

Modelling (3-1d)

Modelling focuses on the key elements of the new learning. The teacher shows the process and/or the product of what students are learning through examples, demonstration, or simulation. The teacher uses models or labels so that the student has the opportunity to see and hear the new information. By drawing attention to key words and attributes, the teacher helps the students to observe and remember because the essentials are identified. Frequently, modelling will assist those students whose preferred learning style is more visual. This behavior is often combined with the input phase of the lesson.



Video - Modelling

A description of how modelling gives a "right hemispheric assist" (Hunter) to students and focuses on the key elements is presented on Tape 3-1 (VHS - 0766). Four illustrations follow this description (VHS 0780 - 0945).

3/4" 614
VHS 0780
Yours ______

Illustration A - Grade 9, Social Studies

Ron uses a modelling technique to teach pertinent facts about Peter the Great. Using symbols and miniature objects he re-enacts how Peter the Great cleared the land, destroying peasants' homes, in order to build the grand city of St. Petersburg. "He has got to get rid of the water and send it out on canals, which become the focus of the city." A foundation has to be built on this marshy land." Ron tells them about some of the cultural changes which subsequently occur at the court.

3/4" 662
VHS 0848
Yours ______

Illustration B - Grade 5/6, Language Arts

Jim is explaining that the three elements of character, setting, and suspense must be woven into the mystery story they will write. Before students work independently, Jim develops a mystery story plot with them at the chalkboard. "Cornelius - where is he? In the fourteenth century, a good place . . . in a haunted lighthouse." He uses the technique (webbing) he would like them to use as they plan the structure of their story. He wants the webbing to be handed in along with the completed story. He stresses that it is important to get all the initial ideas down quickly and decisions can be made later about what to include in the final draft of the story.

3/4" 693
VHS 0890
Yours ______

Illustration C - Grade 12, Math

Marilyn uses diagrams on the chalkboard to demonstrate how to calculate the area between the Z score and the mean. "Let's see what it says in the question. . . What percentage of scores were less than 80%?" She draws on the chalkboard. "How do I find this little bit in here?"

3/4" 709
VHS 0914
Yours ______

Illustration D - Grade 7, Art

Merv demonstrates how to form the calligraphy letters properly. "Everybody watch then, please . . . Start with the letter G. Eight spaces. It's a crescent shape. . . second stroke, the third stroke is half way up from bottom to top. Hands up, how many pen widths? Go ahead. Start working."

Later. "Again, starting at this point and coming down to the base line. Letter J is much the same. I am pleased with the way you're putting down names with them. With I, I could write 'Irene.' Keep the slant that's on your paper."

Positive Modeling

USE: When teacher has been observed frequently enough so that reliable information can be coded

PURPOSE: To see if teacher takes advantage of opportunities to teach through deliberate modeling

Record any information relevant to the following questions:

MODELING THINKING

When the teacher must solve a problem or think through a question, does he or she think out loud? Does the teacher allow students to hear the steps he or she goes through, or explain them after giving the answer?

Does this well when reviewing seat work and homework, but often doesn't explain rationale when she answers students questions during discussion.

Does the teacher include activities that allow students to practice thinking and problem solving (20 questions, brain teasers, solving hypothetical problems)?

Uses drill-like games and contests but none that promotes thinking and problem solving

MODELING COMMITMENT TO LEARNING

Does the teacher give evidence of a continuing active interest in learning (discuss newspaper or magazine articles, books, TV programs, special events, educational activities of teacher)? Only in response to a question or comment from class.

Looking in Classrooms - Second Edition. Thomas L. Good and Jere E. Brophy, New York: Harper & Row, Publishers. 1978. page 161

Check for Understanding (3-1e)

The teacher monitors learning as the lesson proceeds and checks to see that the essential information is in place. Checking for understanding involves finding out if students comprehend what they are learning, or if they possess the skill or information before moving on to using it. The aim is to elicit an observable response that the teacher can monitor. For example, the teacher could ask the student to translate learning into their own words or ask them to "show" her. This feedback information allows the teacher to monitor and adjust instruction during the lesson, to correct and assist students, and actually allows additional input for some students. One would therefore expect the teacher to ask students to explain, to say it in their own words, to give an example, or to show or demonstrate what has been learned. This is preferable to asking whether there are any questions because students may be reluctant to state them or may not realize they do not understand until they are actually required to do the task.

Video - Check for Understanding

An explanation of the skill appears on Tape 3-1 (VHS 0945), followed by three examples (VHS 0956 - 1021).

3/4" 740
VHS 0956
Yours ______________

Illustration A - Grade 7, Science

Merv points to the diagram on the overhead projector and draws attention to the four main areas on the body that get rid of waste. He asks a student to name one. "Correct, although we haven't discussed that one thoroughly yet. Marcus? . . . The large intestine gets rid of solid waste." He indicates that all the areas colored in red are used to get rid of wastes. "Can you name what they are? Melanie, here's where your answer comes in. You have the correct answer for the first one. Perspiration. Where does that occur? . . . Skin."

3/4" 767
VHS 0994
Yours ______________

Illustration B - Grade 1, Math

As her students work in pairs to put some numbers in order Faye watches them to see that they have done the task correctly. She then tells them that after they have finished doing their second envelope they can put it in the shoe box. "Excuse me, I didn't say 'go'. Take a sheet of mixed up numbers. Go to your desk and do it. Then you can have free time. Any questions? Any problems? I'll come around."

3/4"	775
VHS	1004
Yours	

Illustration C - Grade 9, Social Studies

After Ron has finished making his presentation about Peter the Great he asks students to take a moment and write down a few notes in their scribbers. "Then I'll ask several individuals to tell me what he was known for. . . We'll start with Jean. Explain about the city. (Student tells how the water was pumped out). Thank you. Continue please, Rick." (Student says Peter built the University of St. Petersburg).

Tape 3-1 ends after this last example of checking for understanding.

Guided Practice (3-1f)

The "coach" is present to provide a "Knowledge of Results", which is specific feedback to students. The feedback should be immediate so it can serve as extra input as key aspects are being reinforced. This feedback provides the reason why the answer was good (or incorrect) and answers the student question, "How am I doing?" You might hear the teacher say "The addition in the one's column is correct; now, please check the addition in the ten's column."

The new learning is therefore being used under supervised conditions, in a relatively low risk situation. The teacher is able to ascertain whether students have internalized the learning during this phase of the lesson.

Video - Guided Practice

This is the first behavior on Tape 3-2, which is the continuation of Tape 3-1. A short description of the behavior is presented (VHS 0017) followed by four illustrations of the behavior.

3/4" 037
VHS 034
Yours ____________

Illustration A - Grade 1, Math

Faye has distributed number cards to her students. In groups of five, the students are to hold up their own number and stand in line in numerical sequence. After they re-arrange themselves they begin with the lowest number and say their number out loud to the class. Faye assists the first group to get themselves in order, thereby showing subsequent groups how to do it. "Are they in the right place? No? What do they have to do? (Trade spots). Hold it up. Now let's read and see if these are okay."

Later. Faye will give each pair an envelope and see if they can arrange the number cards and put them in the right order. "Done already? Be sure you check. Read the numbers to each other." She does a quick check too as she monitors the students as they work.

3/4" 104
VHS 113
Yours ______

Illustration B - Grade 11, Math

Marilyn asks students to calculate how many diagonals there are in a polygon - one with 10 sides. "It's probably called a decagon" She watches them work it out using the method she has just taught them. "Use the combinations, Scott." This question has been a little tricky and she says, " Don't congratulate yourselves too quickly. . ." Since she has only asked for diagnonals, students must subtract 10 lines which are the sides of the figure. Next she asks them to work out the equation for the diagonals of an N-gon.

3/4" 168
VHS 192
Yours ______

Illustration C - Grade 1, Language Arts

Helen has divided the class into two (half at the chalkboard and the other half at their seats. They will trade places later). They are practising their spelling words under her supervision. They may look at the words on the chart if they are having trouble. "Trip. The T-R sound. It was a problem before." One student says, "It's like Tracey". "That's a good way to remember it. Very good, Otis. Number two is "bus". What makes the uh sound. Nice printing this morning. Yah, you've got it."

3/4" 210
VHS 245
Yours ______

Illustration D - Grade 7, Arts

Merv. circulates to see how students are making their calligraphy letters. "Not too much of a slant. Follow the lines." He stops at each desk, models a letter for them, and has a look at their work.

Closure (3-1g)

Closure is a process of summary by the student which focuses him on what he has learned, not merely done (student closure). The teacher should ask for some observable response from the student. The teacher may also choose to summarize the key points of the lesson (teacher closure). Closure allows the student to internalize the new learning before moving on to the next.

Video - Closure

Closure is described on Tape 3-2 (VHS 275) and two teaching segments are provided as illustrations of closure (VHS 291 - 357).

3/4" 246
VHS 291
Yours ______

Illustration A - Grade 5/6, Language Arts

As Jim ends his class discussion period (Talk Time) he asks students to summarize the key points they have learned about problem solving - understand the problem, decide what to do, do it, and check to see if it works. "This process works whether you're dealing with computers, math problems, or problems in your own lives. Any questions?"

3/4" 260
VHS 307
Yours ______

Illustration B - Grade 7, Science

As Merv ends his class he says, "Let's just spend a couple of moments reviewing these body wastes. Hands up if you can tell me the four main organs used in the excretory system. Carey. (Student gets three out of four correct.) The small intestine - it's true to some extent. It's where a lot of nutrients are absorbed . . . you mean the . . . large intestine. Now what are some things the body gets rid of? There are quite a few of them . . . What are they, Richard? . . . Any others? Heat, that's a good one. No one has mentioned that one before. What I'd like you to do is the exercises on pages 113-118."

Independent Practice (3-1h)

Independent practice gives students the opportunity to try the new learning on their own. Once the teacher is sure students have grasped the concepts taught, work will be assigned to be completed without teacher direction. This may be done in class or sent home as homework. The practice should be related to the objective of the lesson and should solidify the learning by repeating the task. This makes the student more fluent in the use of the skill.

Video - Independent Practice

An explanation of Independent Practice is provided on Tape 3-2 (VHS 357) along with one videotaped example of a student working on an assignment independently.

3/4" 305
VHS 365
Yours ______

Illustration A - Grade 5/6, Language Arts

A boy has begun to work on writing his mystery story. He decides on the characters and what the story will be about. He thinks and he writes. A fellow student exchanges a comment with him and then he resumes working on the task.

CHAPTER THREE - MODULE TWO

OPTIMIZE ACADEMIC LEARNING TIME (3-2a)

(Plans, Organization and Implementation, Task Oriented/Businesslike Orientation, Time on Task)

> **"Teachers should organize and manage their classes so as to optimize academic learning time ... time during which students are actively and productively engaged in their learning tasks."**

Time A Valuable Commodity

Research has overwhelmingly confirmed there is a strong positive relationship between time spent actively involved in learning and the level of student achievement. Time allocations vary a great deal from one state and province to another, and students have vastly different exposures to school subjects, reflecting the priorities of their respective school boards. More time spent in one subject area is at the expense of time spent studying other subjects. Time allocated to instruction is to be sharply differentiated from time spent actively engaged in learning activities in that subject. Much time can be "wasted" getting ready to begin, regaining student attention, and changing from one learning activity to the next. Given the obvious impact of "academic learning time" (time spent productively learning the subject - with an 80% success rate) on student outcomes, time is a precious commodity that must not be wasted. The preventative skills and the teacher's expertise in keeping students engaged in work serve to maximize the time spent actively involved in learning. The teacher is able to manipulate the use of time. Hence, it is considered to be the number one variable in instruction.

Active Participation

One very powerful skill, keeping students actively involved in the lesson, is examined in more depth here because it illustrates one way a teacher can increase student time on task. It is known in the Teacher Effectiveness Program as the skill of "Active Participation."

The main aim is to increase accountability and to involve more students in more activities. It is easy for a student to treat instruction as a "spectator sport" if the teacher engages in dyadic (single student) question and answer interactions most of the time. Once his token question and answer sequence is completed, the student can sit back and watch the others take turns, or tune out altogether. If the student is held "accountable" in some way for listening and for answering more of these questions himself, more learning will take place.

The teacher can vary the mode of instruction in several ways. By creating discussion groups, more students get a chance to express their ideas. By assigning students to work in pairs, the students can learn to assist each other, thereby encouraging more active involvement. The teacher can pose questions to the whole class which require each student to respond. By having a laminated tagboard card plus crayon (plus sock to erase the answer) elementary students can be asked to record the answer on the tagboard and the teacher walks around or asks the students to hold the cards up so she can quickly see the answers. (All students could find a place at the chalkboard or have individual chalkboard slates.) Having a scratch pad and pen works just as well with older students. By circulating around the room and peering over shoulders, the teacher can motivate students to become very involved indeed!

Hunter suggests devising a set of hand signals by which students can indicate whether the math story problem involves addition, subtraction, multiplication or division (See Tape 3-1, Anticipatory Set, Illustration D). By holding up a number of fingers students can tell the teacher whether a, b, c, or d is the correct answer. All of these methods give the teacher instant feedback on whether the information is being learned. It also makes the lesson much more interesting for the student because he has a legitimate way of remaining involved for more of the time.

The teacher can pose questions which challenge more students to think about the answer even if the teacher only asks one student to respond. Beginning the question with phrases like "Picture in your mind," "Visualize," "Put yourself in the place of," or "What if" engages the mind covertly in mulling over the question and thinking it through. The teacher must allow wait time before selecting the respondent.

The teacher can also structure the question so that more/most students have an opportunity to provide the answer. Directions such as "If you agree, please raise your hand," "Please point to the answer on your list," or "Discuss it in your group," allow for more student involvement. Teacher participants in the Teacher Effectiveness Program look rather skeptical when we urge them to try this technique; "Talk it over with a neighbour" but they are delighted once the mechanics are in place. One must be able to tolerate 12 or more simultaneous conversations and to command student attention again, of course. Students are more enthused about instruction when these response opportunities are programmed into the lesson. After a few practice runs, most teachers find this a valued skill and use it frequently.

All of the foregoing illustrations increase the amount of time on task and involve more students in more of the learning. Since time is such a precious commodity, one should use it to the fullest advantage.

Time Wasters

There are "time wasters" in every school day but some teachers are not successful in minimizing them. Here are some examples of time that normally is counted as part of a school day but is not classified as "productive learning time."

- morning and afternoon opening exercises
- PA announcements
- teacher collecting forms, signed tests, money for field trips and pictures
- transition time

Before we turn to transitions, we need to consider one very important component, the Standard Signal.

STANDARD SIGNAL (3-2b)

(Clarity of Instruction, Task Oriented/Businesslike Orientation, Time on Task)

> **"Teachers should use a standard signal to get the students' attention when beginning a class or moving from one grouping arrangement to another."**

Standard Signal

It is not possible for a student to be conversing with another student and listening to the teacher at the same time. The student may be quietly daydreaming or reading instead, but the teacher needs to gain full student attention before beginning a lesson. It is recommended that the teacher have a standard signal to begin that is recognized and acknowledged by students. Teachers of younger grades have fairly observable signals. You will find the signals used by high school teachers to be far more subtle. Helping the teacher to identify the repertoire of signals is sometimes interesting because (s)he may not be aware of the ones used. Standing in a certain spot, in a certain way (hand on hip, arms crossed), or removing a jacket and putting it on the back of a chair may be the signal to begin. Refocusing the overhead projector or looking up and around may serve as a signal. Students come to know when a teacher is ready, so some signal is being used. Often it is verbal, "Boys and girls," "Alright," or "May I have your attention, please?"

The teacher frequently has to wait for stragglers after giving the signal to begin. A calm, neutral expression with direct eye contact may be sufficient. If not, moving closer to students who are not ready to listen, and perhaps touching a shoulder may also be necessary. The teacher might say "Thank you" to the student for the co-operation (finally!). Notice the "signal" used and how quickly students respond to it. Is the signal effective? Does the teacher scan the class to double-check that all students are attentive before starting the lesson?

Video- Standard Signal

A description of the teacher behavior of using a standard signal to begin is presented first in Tape 3-2 (VHS 385). Five examples of teachers using a signal to begin instruction follow (VHS 367 - 492).

	3/4"	367
	VHS	445
Illustration A - Grade 12, Math	Yours	

Ted checks the hall to see if any more students are in sight. He comes back into the room and says, "I guess that's it. Maybe we can start. I'm handing back the quiz."

3/4" 371
VHS 449
Yours ____

Illustration B - Grade 2/3, Language Arts

Heather has finished her previous activity. Students are moving about putting materials away. She says, "By the time I count to three, everybody should be back in their seats. 1-2-3. We can straighten that out later Bryce."

3/4" 381
VHS 465
Yours ____

Illustration C - Grade 10, French

Denise prepares to start her class. She goes out into the hall, returns and says "Good day! Lets begin."

3/4" 388
VHS 474
Yours ____

Illustration D - Grade 1, Language Arts

Faye's students are completing independent work but it is time to gather them together for a lesson. She tells one student, "I'm going to call people to centre right away." She goes to her desk and dings her bell. "Boys and girls will you please bring Leap Frog and come to centre?"

3/4" 395
VHS 483
Yours ____

Illustration E - Grade 9, Social Studies

After the bell, Ron stands and waits a few seconds. He walks to the middle of the room and then back up to the front. He says, "I'd like to lay out what I have planned today."

TRANSITION TIME (3-2c)

Each time students move from one activity to the next, materials have to be put away and others taken out. In some cases, students have to move desks, change seats, or line up at the door and walk down the hall to a new location. "Transition" activities can eat up a major portion of allocated learning time if the teacher is not skilled in moving children quickly from one activity to the next, getting their attention, starting them off, and keeping them involved in the work. Studies revealed that in some classrooms a shocking amount of time is "wasted." A half-hour a day adds up to 10 hours a month.

When you observe in a classroom for a whole morning, count the minutes of allocated time that is not used productively. Some time is required for these activities, to be sure. Add up the time spent waiting to begin, or time spent settling disturbances and add in the time used in transitions and any time you feel is "redundant" (overdwelling on instructions). Draw up a coding form specifically for observing the use of time; it could look like this:

Coding Sheet For Time Spent In Transitions

TIME: START AND END	ACTIVITY	TOTAL TIME
8:31 8:37	Teacher calling names, finding books, collecting homework, two items of "news"	6 min.
9:10 9:11½	Disturbance in class. Teacher deals with it.	1½ min.
9:18 9:20	Distribution of worksheets, getting textbooks open to page 79, waiting to begin instructions.	2 min.
		9½ min. by 9:20 AM

While we are on the subject of transitions, let us outline the characteristics of effective ones. This will provide focus for you to watch for them specifically.

Function of a Transition

The main function of a transition is to move students expediently from one activity into the next. The change may be minor (moving from a class discussion to recording notes from the discussion in a scribbler) or fairly major (from one subject to another, or one room to another). It may be the teacher's intention to provide a "break" for students by allowing them to exchange a comment or two with a friend while getting things ready. Between high-intensity activities such a break is needed and welcomed. Some teachers purposely program in a transition, requiring the physical movement of pupils, to provide the break that children in younger grades actually need. The teacher's rules and routines will make clear to students what is expected of them during a transition (who does what by when). Normally, the teacher's aim is to effect a quick and quiet transition that maintains classroom momentum.

Planning for a Transition

The planning the teacher has to do for a transition includes listing the supplies needed for the next lesson, sequencing the teacher directions to be provided, and making a game plan for the teacher's own actions during the transition. The teacher may plan to move through the crowd, helping the dawdlers and finding missing items so all will be ready to start the activity together, or she may plan to be distributing sheets on students' desks while they continue to find their things. At the beginning of the transition, the teacher tells students what they will learn and do in the next activity, specifically which items are needed, and why these supplies are required. When all of the instructions have been given, the teacher will signal that the students should begin to get these things. The teacher then waits for the attention of all students before starting the next lesson.

Coding Form For Transition

Signal for class attention? NOTES:

Time is ________________ .

Says what next activity is?

Lists the supplies needed?

Gives directions in logical sequence?

Specifies time provided for transition?

Indicates "begin" transition?

Teacher does what during transition?

Waits to start new activity - signals for attention?

Time is ____________

Total time used for transition is:

____

As an example, the transition could involve moving a class of Grade 7 students from the regular classroom (following a science lesson) to the lab next door to conduct two follow-up experiments stationed at six tables in the lab. Take a minute and think of the various instructions and established routines that would be required for this transition...

Transitions are very important and require a great deal of teacher planning. Teachers may not have viewed transitions in this light before, but they do hold a great potential for wasted class time and student disruptions so the teacher's skill in executing efficient transitions is a valued one.

Video Transitions

A description of transitions is presented (VHS 492). Four examples of transitions (moving students from one activity to the next) are shown. Note the time taken to reorient the students and note the teacher behaviors which encourage the students to begin the task as quickly as possible so that academic learning time will not be lost.

3/4" 423
VHS 520
Yours ______

Illustration A - Grade 11, Math

"Alright put that away. The next thing we need is the permutations." Marilyn gets her book and finds the page 347. "Come on guys, you can look at that (returned quiz papers) later." She waits. "Okay! Are there any of those on that page that you find incredibly difficult? #3 please - Ah! that's a good one for today."

3/4" 442
VHS 546
Yours ______

Illustration B - Grade 7, Math

Students have just completed a short quiz. Merv says, "Alright that's good - I'll get these corrected . . . Turn to the exercise we did yesterday. We'll correct that one. Number one - Melanie - begin - please."

3/4" 454
VHS 563
Yours ______

Illustration C - Grade 2/3, Math

Heather wants her Grade Three's to join her at the back table to do a little test on clock time. "Grade Three's - you need pencils and erasers at the back table. Leave your books. Pencil and eraser, Peggy." The tape machine needs to be removed from the table (and the filming crew has taken some chairs!) A grade 2 student who has been working at the back table needs to be relocated. Bryce notices that the dial clocks have no hands and Heather tells him that the students will be filling these in.

3/4" 477
VHS 593
Yours ______

Illustration D - Grade 9, Social Studies

Ron finishes asking a question about material just studied and moves on to the next part of the lesson. "I'd like you to open your books please to page 54." He stands at the front and waits while students find the page. "The person that we're looking at - her name is Catherine the Great."

Instrumentation

Teacher manages transitions between different activities in a lesson

1 Low	2	3 Med	4	5 High	Not Observed

Notes

- has materials ready for next activity (prepared in advance)
- has enough copies available
- makes sure students have materials ready for next activity
- has student's attention before beginning next activity
- uses a signal to start and waits
- provides link to the objective if this activity is a different part of same lesson

Teacher moves children from place to place efficiently

1 Low	2	3 Med	4	5 High	Not Observed

Notes

- follows established procedures for movement
- students know rules and routines for moving
- waits till students are ready before moving them
- accomplishes the move quickly and quietly
- positions herself strategically so she can see all the children
- moves among students to assist them in moving, getting ready

(Adapted from MacCannell and Young, 1980).

Transitions and Group Management

USE: During organizational and transition periods before, between, and after lessons and organized activities

PURPOSE: To see if teacher manages these periods efficiently and avoids needless delays and regimentation

How does the teacher handle early morning routines, transitions between activities, and clean-up and preparation time?

Record any information relevant to the following questions:

1. Does the teacher do things that students could do for themselves?
2. Are there delays caused because everyone must line up or wait his turn? Can these be reduced with a more efficient procedure?
3. Does the teacher give clear instructions about what to do next before breaking a group and entering a transition? Students often aren't clear about assignment so they question her during transitions and while she is starting to teach next group
4. Does the teacher circulate during transitions, to handle individual needs? Does he take care of these before attempting to begin a new activity? Mostly, problem is poor directions before transition, rather than failure to circulate here
5. Does the teacher signal the end of a transition and the beginning of a structured activity properly, and quickly gain everyone's attention? Good signal but sometimes loses attention by failing to start briskly Sometimes has 2 or 3 false starts.

Check if applicable:

________ 1. Transitions come too abruptly for students because teacher fails to give advance warning or finish up reminders when needed

________ 2. The teacher insists on unnecessary rituals or formalisms that cause delays or disruptions (describe)

___✓___ 3. Teacher is often interrupted by individuals with the same problem or request, this could be handled by establishing a general rule or procedure (describe) See # 3 above

___✓___ 4. Delays occur because frequently used materials are stored in hard to reach places Pencil sharpener too close to reading group area, causing frequent distractions.

________ 5. Poor traffic patterns result in pushing, bumping, or needless noise

________ 6. Poor seating patterns screen some students from teacher's view or cause students needless distraction

________ 7. Delays occur while teacher prepares equipment or illustrations that should have been prepared earlier

Looking in Classrooms - Second Edition. Thomas L. Good and Jere E. Brophy, New York: Harper & Row, Publishers. 1978. page 194

WORTHWHILE SEATWORK (3-2d)

(Pace of Instruction, Individualization of Instruction)

> **"When students work independently, teachers should ensure that the assignments are interesting and worthwhile and still easy enough to be completed by each pupil working without teacher directions."**

Independent Seatwork

At some point in the school day, students are assigned work to be done independently. One of the earliest skills a teacher has to perfect is designing independent activities that are neither too difficult nor too easy so that time can be carved out of the day for work with a small group or for the provision of individual assistance. Worthwhile activities are not merely "busywork" or "fun" tasks but are activities that are relevant to the teaching objective. The seatwork assigned should qualify as independent practice exercises after instruction has been completed by the teacher. The teacher should (be able to) verbalize the specific purpose the seatwork accomplishes and this should not be sheer entertainment or be only tangentially related to the teaching objective.

Meaning and Interest

If the teacher has planned the lesson well, then the links between activities can be explained to students who see that the task is a legitimate extension of previous work. Understanding these links will help to provide meaning and purpose for the activity. This creates "interest", as does an adaptation of the material to incorporate student concerns. For example, rewording math story problems about avocado farm crops so they describe local industries instead still affords practice in applying skills but adds interest and meaning to the exercise. Students may become more involved when the material seems to relate to everyday life.

Level of Difficulty

Another aspect of the seatwork assigned is its level of difficulty. Work that is too easy does not serve as an opportunity to practise skills that students are learning so students complete it quickly and have free time to pursue their own interests quietly (or if the class is not that well managed, to channel their efforts into disturbing other students who are working). Work that is too difficult to do causes frustration to both student and teacher. The teacher has to exercise diagnostic skill in choosing independent assignments that are based on a knowledge of the student's ability, prior work performance, and persistence. This does not imply that all students will do exactly the same type or amount of seatwork, for if the teacher is adjusting to individual differences, this would be inappropriate. It is desirable that the work pose a "challenge" but not one that is insurmountable.

Video - Worthwhile Seatwork

A description of this teacher behavior which is concerned with providing useful independent practice in the form of seatwork is presented (VHS 611). No short video examples are available but both tapes 3-3 and 3-4, entitled Student Engaged Time A and B contain six opportunities to watch two students work. The camera moves back and forth between these two students for approximately 15 minutes. The six classroom settings in which the student engaged time segments were filmed were:

Tape 3-3

Grade 11, Math
Grade 1, Math
Grade 5/6, Language Arts

Tape 3-4

Grade 7, Math
Grade 1, Language Arts
Grade 11, Math.

You can hear the teacher in the background. You may want to use some of the coding suggestions from the next part of the manual (Student Engaged Time) to gather information from these tapes.

Student Independence in Individual Work

USE: When students interact with teacher during periods of individual work assignment and/or in open settings.
PURPOSE: To see if individual students or students generally, over time, are becoming more autonomous learners.

Below is a list of student behaviors that could occur during seatwork assignments. Check each behavior as it happens.

Frequency* Type Contact

__________ 1. After beginning task, student seeks additional instructions about what to do.
__________ 2. Student seeks confirmation about being on the right track ("Is this okay?").
__________ 3. Student seeks substantive advice from teacher ("Is there another source that could be consulted?").
__________ 4. Student seeks evaluative feedback ("What do you think about this conclusion?").
__________ 5. Student tells teacher what was done and why (showing, justifying).
__________ 6. Student asks teacher what to do next after completing the initial assignment (seeks direction).

*In this particular example, the scale will yield information describing the frequency of different types of contact that occur with the teacher during a given amount of time. However, codes could be entered for individual students or for types of students by assigning them a number (high achievers = 1, middle achievers = 2, and so forth).

Looking in Classrooms - Second Edition. Thomas L. Good and Jere E. Brophy, New York: Harper & Row, Publishers. 1978. page 275

Student Involvement in Assigned Work

USE: When some or all students are assigned individual seatwork
PURPOSE: Every two minutes, record the involvement levels of all students to assess degree of student involvement in assigned work
Number of students assigned to individual work: ________
Is teacher available to supervise assignment work? ________
Is aide(s) present to help? ________

BEHAVIOR CATEGORIES

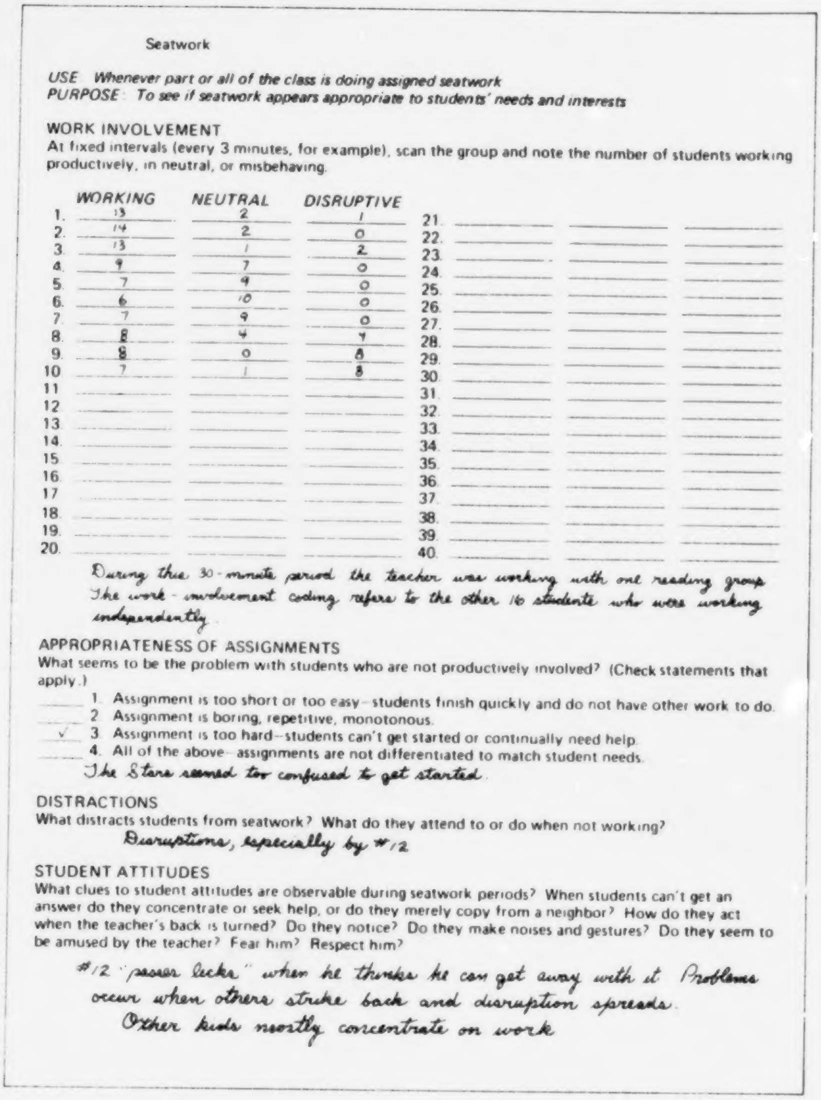
1. Clearly involved in assigned work.
2. Can't tell—may be thinking (code this rather than 1 or 3 if there is any doubt)
3. Definitely not doing assigned or chosen work.
4. Misbehaving.

Time	*Student **	*Number of Students in Each Involvement Category*			
		1	2	3	4
2:00		20	5	0	0
2:02		18	5	2	0
2:04		15	5	5	0
2:06		15	4	5	1

*It is possible to make a rating for *all* students or for some subdivision of the class: H = high achievers; M = middle achievers; L = low achievers; G = girls; B = boys.

If several students are not involved, attempt to explain the lack of task engagement (students have finished, have given up, are waiting for the teacher, are distracted by others, no apparent reason).

Looking in Classrooms - Second Edition. Thomas L. Good and Jere E. Brophy, New York: Harper & Row, Publishers. 1978. page 276



Seatwork

USE Whenever part or all of the class is doing assigned seatwork
PURPOSE To see if seatwork appears appropriate to students' needs and interests

WORK INVOLVEMENT
At fixed intervals (every 3 minutes, for example), scan the group and note the number of students working productively, in neutral, or misbehaving.

	WORKING	*NEUTRAL*	*DISRUPTIVE*				
1.	13	2	1	21.			
2.	14	2	0	22.			
3.	13	1	2	23.			
4.	9	7	0	24.			
5.	7	9	0	25.			
6.	6	10	0	26.			
7.	7	9	0	27.			
8.	8	4	4	28.			
9.	8	0	8	29.			
10	7	1	8	30.			
11				31.			
12				32.			
13				33.			
14.				34.			
15				35.			
16.				36.			
17				37.			
18.				38.			
19.				39.			
20.				40.			

During this 30-minute period the teacher was working with one reading group. The work-involvement coding refers to the other 16 students who were working independently.

APPROPRIATENESS OF ASSIGNMENTS
What seems to be the problem with students who are not productively involved? (Check statements that apply.)

____ 1. Assignment is too short or too easy—students finish quickly and do not have other work to do.
____ 2. Assignment is boring, repetitive, monotonous.
_✓_ 3. Assignment is too hard—students can't get started or continually need help.
____ 4. All of the above—assignments are not differentiated to match student needs.

The Stars seemed too confused to get started.

DISTRACTIONS
What distracts students from seatwork? What do they attend to or do when not working?

Disruptions, especially by #12

STUDENT ATTITUDES
What clues to student attitudes are observable during seatwork periods? When students can't get an answer do they concentrate or seek help, or do they merely copy from a neighbor? How do they act when the teacher's back is turned? Do they notice? Do they make noises and gestures? Do they seem to be amused by the teacher? Fear him? Respect him?

#12 "passes licks" when he thinks he can get away with it. Problems occur when others strike back and disruption spreads.
Other kids mostly concentrate on work

Looking in Classrooms - Second Edition. Thomas L. Good and Jere E. Brophy, New York: Harper & Row, Publishers. 1978. page 373

Individual Participation in Small-Group Work

USE: When a small group is operating and the teacher is not part of the group
PURPOSE: To assess the involvement and participation of individual students during small-group work

*Observe the target student for 15 seconds and make a code. Repeat the cycle for the duration of the small-group activity.**

________ 1. Reading (finding information)
________ 2. Manipulating equipment (filmstrip, slide rule)
________ 3. Participating in general discussion (telling and listening to others)
________ 4. Listening to general discussion
________ 5. Presents idea to group (others are listening to the target student)
________ 6. Talking to individual (an aside the conversation is not part of the group discussion)
________ 7. Listening to individual (an aside the conversation is not part of the group discussion)
________ 8. Passive (can't tell if student is involved)
________ 9. Misbehaving
________ 10. Leaves group

*Note that it would be possible to use the form to code different individual students in the group (code one student for a minute, then switch to another student). Furthermore, the scale could be altered to provide information about the group. For example, the percent of the group that falls into each category could be noted.

Looking in Classrooms - Second Edition. Thomas L. Good and Jere E. Brophy, New York: Harper & Row, Publishers. 1978. page 336

STUDENT ENGAGED TIME (3-2e)

Another way to assess the use of time is to observe what students are doing. Smyth (1979) developed a profile of four students and their use of time in a Grade 6 classroom. The writer was the reliability check for the data collection and therefore learned how to code data on an instrument designed for that purpose. A greatly simplified version of that instrument (Marliave, Fisher, Filby and Dishaw; 1977) would look like:

Form for Student Engaged Time Data

TIME	MA	LA	INSTRUCTOR MOVES						LEARNER MOVES						
			AM	AF	AQ	EN	SD	TE	EW	EO	EC	ED	NT	NW	NO
9:03	x				x						x				
9:06	x			x						x					
9:09	x			x							x				
9:12	x				x										x
9:15	x					x					x				

TIME	data were coded every three minutes (but supplementary anecdotal notes enabled more data to be aggregated).
MA/LA	mathematics or language arts class

INSTRUCTOR MOVES

AM	academic monitoring - looking or listening to student response
AF	academic feedback - informing whether answer was correct or incorrect

AQ	academic questioning
EN	teacher giving a needed explanation to student
SD	structure or direct refers to statements of goals, objectives, instructions, or directions
TE	task engagement feedback about on-task or off-task behavior of students

LEARNER MOVES

EW	engaged in written response
EO	engaged, oral response statement or question
EC	engaged covertly, thinking, listening, reading silently
ED	engaged in listening to directions, explanations
NT	not engaged - transitions, interim activity
NW	not engaged - waiting for help from the teacher
NO	not engaged, off-task, socializing, daydreaming, misbehaving

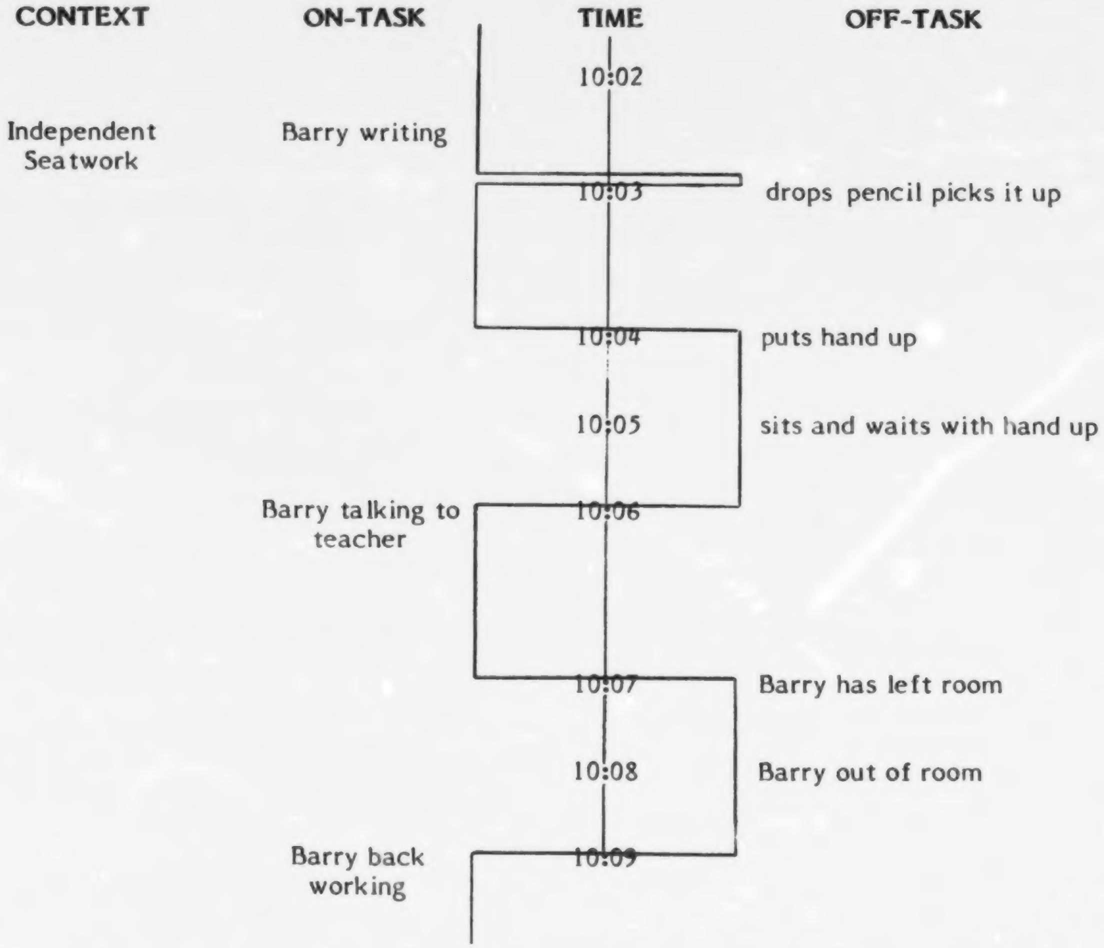
Using Morrison's (1926) technique, Smyth displayed his data in a more graphic way that allowed the reader to see at a glance the extent of on-task behavior. The page is divided by a vertical line on which minutes are recorded. A second line crosses the vertical line at right angles and displays blocks of time during which the student was actively engaged in learning (shown to the left of the central vertical line) and blocks of time when the student was off task (shown to the right of the central vertical line). The writer collected engaged time data in her study and found it possible to reconstruct the graphic profile from detailed notes. Three students could be watched very comfortably at the same time by cyclically noting what they were doing. You will not notice what the teacher and other students are doing (except to note the context) because you will be kept very busy gathering data on the students. You may find it possible to increase the number of students to four or five when you become more proficient.

Notes could look like:

> Independent work 10:02 Sue writing; Tom thinking, writing; Barry writing. 10:03 Barry drops pencil, picks it up; Sue writing; Tom writing; Barry has hand up. 10:04 Sue working; Tom pausing (thinking?); Barry sitting with hand up. 10:05 Sue and Tom writing; Barry waiting. Teacher comes to Barry. 10:06 Sue writing; Tom working; Barry talking to teacher getting help. 10:07 Barry has left room (bathroom?); Sue turning pages in text looking up something; Tom writing. 10:08 Sue working; Tom working; Barry out of room. 10:09 Barry back, working; Sue and Tom writing.

Engaged Time Profile

Barry's profile for seven minutes would look like:


CONTEXT
ON-TASK
TIME
OFF-TASK
10:02
Independent Seatwork
Barry writing
10:03
drops pencil picks it up
10:04
puts hand up
10:05
sits and waits with hand up
Barry talking to teacher
10:06
10:07
Barry has left room
10:08
Barry out of room
Barry back working
10:09

An hour's worth of data on three or four students is very interesting. Students often appear to be working but on closer inspection may not be. Remember to give them the benefit of the doubt when you are unsure and code him as "engaged." It is vital that students do not become aware of your heightened interest in their activities. Look blankly ahead, through them, and avoid making eye contact. Cast your eyes around frequently so their suspicions will not be confirmed.

You will soon think to ask what percentage of time on task would be acceptable. What would be the expected minimum and maximum? Studies show that 77% to 90% is well within the normal range. Like us, students take "breaks," look up at the ceiling, examine their erasers, think about non-school matters, so some time will be spent off-task even though the student is not disrupting another student. This data can be of great interest to the teacher who may need to keep a more watchful eye on a particular student whose attention wanders off frequently. Your data may provide pertinent information to the teacher about this student. If too many class members spend a low percentage of time actively involved in learning, there is an urgent need for the teacher to restructure activities and to monitor student behavior more attentively.

Video - Student Engaged Time

As mentioned on page 3-31, two tapes 3-3, and 3-4 have been prepared so you can observe what students are doing during independent work activities in six classroom settings. Specifically, these settings are:

Tape 3-3 - Student Engaged Time A

12 minutes - Grade 11, Math., Marilyn
14 minutes - Grade 1, Math., Faye
17.5 minutes - Grade 5/6, Language Arts, Jim

Tape 3-4 - Student Engaged Time B.

16 minutes - Grade 7, Math., Merv.
20 minutes - Grade 1, Language Arts, Helen
11 minutes - Grade 11, Math., Marilyn (2 different students from the ones in Tape 3-3).

Teacher's Use of Time

USE: Whenever activities are introduced or changed

PURPOSE: To see if the teacher spends time primarily on activities related to teaching and learning

Record starting time and elapsed time for the following teacher activities (when more than one activity is going on, record the one in which the teacher is involved). Totals for the day are entered in the blanks in the lower left corner of the page.

BEHAVIOR CATEGORIES

1. Daily rituals (pledge, prayer, song, collection, roll, washroom, etc).
2. Transitions between activities
3. Whole-class lessons or tests (academic curriculum)
4. Small-group lessons or tests (academic curriculum)
5. Going around the room checking seatwork or small group assignments
6. Doing preparation or paperwork while does something else
7. Arts and crafts, music
8. Exercises, physical and social games (nonacademic)
9. Intellectual games and contests
10. Nonacademic pastimes (reading to class, show-and-tell, puzzles and toys)
11. Unfocused small talk
12. Other (specify)

NOTES

#3, 5, 7 = Reading Groups
#11, 13 = Math lesson & Seatwork
#9 = outside recess (free play)

TOTAL TIME PER CATEGORY

BEHAVIOR CODE	TOTAL MINUTES
1.	20
2.	24
3.	38
4.	88
5.	30
6.	
7.	
8.	15
9.	
10.	

CODES FOR EACH NEW ACTIVITY

	STARTING TIME	BEHAVIOR CODE	ELAPSED TIME
1.	8:15	1	15
2.	8:30	2	3
3.	8:33	4	27
4.	9:00	2	5
5.	9:05	4	25
6.	9:30	2	4
7.	9:34	4	36
8.	10:10	2	5
9.	10:15	8	15
10.	10:30	2	2
11.	10:32	8	38
12.	11:10	2	5
13.	11:15	5	30
14.	11:45	1	5
15.	11:50	Lunch	
16.			
17.			
18.			
19.			
20.			
21.			
22.			
23.			
24.			
25.			
26.			
27.			

Looking in Classrooms-Second Edition. Thomas L. Good and Jere E Brophy, New York: Harper and Row, Publishers. 1978. page 115

Instrumentation

Teacher uses instructional time adequately

1 Low	2	3 Med	4	5 High	Not Observed

Notes

- has materials prepared and well-organized
- settles children down before starting the lesson
- gives directions clearly
- activities in the lesson support the teaching objective
- keeps students on task by frequent monitoring of individual's activities

---

(Adapted from MacCannell and Young, 1980.)

CHAPTER THREE - MODULE THREE

MINIMIZE DIRECTION GIVING

(Plans, Organization And Implementation, Task Oriented/Business Like Orientation, Academic Learning Time)

> **"Teachers should keep to a minimum such activities as giving directions and organizing the class for instruction. They can do this by writing the daily schedule on the board, ensuring that pupils know where to go and what to do, etc. Listening skills should also be emphasized."**

Minimizing Organizational Activities

Activities that prepare the teacher and students for learning are very necessary precursors but they can intrude upon academic instructional time if the teacher does not make conscious efforts to minimize them. The observer should look for the short cuts and routines the teacher uses to get students ready quickly. For example, the distribution of worksheets should be speedily effected. Many teachers count out enough for the students in each row and hand them to the student sitting in the front to pass out or to take one and hand the rest back. Other teachers may have "monitors" or genie assistants who promptly materialize when supplies need to be handed out or collected.

On the worksheet, the teacher may have provided very clear directions (perhaps has rewritten the original directions so they are clearer) or may have provided examples or suggestions that enable students to understand the assignment. On the blackboard the teacher may have quickly demonstrated (modelled) the task to the class or may have shown a completed project to the class. The teacher may have mentioned one or two page numbers of importance. As these were being spoken, the teacher also wrote them on the blackboard for easy reference. This helps students in remembering because they see as well as hear the numbers and it prevents the resident class "time-waster" from asking, in another 10 minutes, "What pages did you say we should do?" Peers would consider this a foolish question for the numbers are recorded on the blackboard in their usual spot.

Inherent in this behavior of minimizing organizational activities is the necessity for having a workable set of Rules and Routines (see page 2-12) that communicates to the students clear expectations that they come to school to work and that the teacher expects their co-operation and best efforts in this regard.

The teacher conveys the expectation that when directions and explanations are being given, students will be attentive and will listen closely. If there are misunderstandings, they are to be clarified before the class gets started on the assignment. Having secured class attention, provided explanations, and eliminated misunderstandings by checking for student understanding, the teacher does not repeat the instructions except in extenuating circumstances. This set of behaviors helps to promote student listening skills for it is most important that they know what to do, especially if direction-giving is kept to a minimum. Sometimes student confusion is due to a preoccupation with other matters while the teacher is setting the stage for the activity. The teacher must be alert to spot those students whose full attention is not trained on the directions.

Video - Minimizing Direction Giving

A description of the behavior of keeping directions to a minimum so that academic learning time can be maximized is given on the video tape 3-2 (VHS 642). Four examples follow and are briefly described below.

3/4" 538
VHS 676
Yours ______

Illustration A - Grade 11, Math

Permutations and combinations. Marilyn says, "There are situations when you've got 100. How would you choose 95? The number would be smaller . . . How do we choose five to leave out? You have the definition. Take a minute and prove, using the definition, that 25 choose 3 is the same as 25 choose 22. Choosing 3 is the same as leaving out 22. See if it comes out the same."

3/4" 551
VHS 693
Yours ______

Illustration B - Grade 2/3 Language Arts

Heather says, "What I would like the Grade Two's to do . . . I'll put a check mark by three words. Use them in the same sentence or make three different sentences. When you have finished, put your work on the filing cabinet. Do your own proof reading to see if you have left anything out." She ticks three words from the list of words on the chalkboard.

3/4" 565
VHS 712
Yours ______

Illustration C - Grade 11, Biology

Peter says, "Now, what I want to do is give you information about Biological Indicators . . . stop and let you do some calculations on Biological Indicators. Get some note-taking stuff and we'll get started right away. Okay, first of all . . ."

3/4" 574
VHS 724
Yours ______

Illustration D - Grade 10, French

Denise explains that she will give each group an envelope. "Get some paper. There are seven envelopes. In each one there is a question and answer in the passé composé. There is a noun in the question and a pronoun in the answer. There are two sets of each number - two number one's, two number two', etc." She hands them out.

CHAPTER THREE - MODULE FOUR

TEACHER CLARITY

(Clarity of Instruction, Teacher's Expectations, Understanding of Instructional Goals)

> "Teachers should provide a clear presentation of material. There are a number of ways of doing this:
>
> (a) Teachers should communicate at the pupil's level of comprehension.
> (b) Teachers should present information to students in a clear, well-organized manner.
> (c) Teachers should check student understanding of a task by asking them to explain what is expected of them, and
> (d) Teachers should have sufficient knowledge of the subject matter."

Clarity

A key ingredient in the presentation of a successful lesson is teacher clarity. This is more than just the ability to ensure that the meaning of material is shared by students and the teacher. It involves several teacher behaviors that have to do with the organization and planning for the lesson as well as good delivery skills during instruction. A more global discussion of clarity is presented in Module 5, Behavior 1 (page 5-2). Clarity is a multifaceted teaching behavior, and this discussion considers clarity as it is evidenced during the presentation of lessons.

Student Comprehension Level

Having a diagnostic knowledge of the level of student achievement and ability, a teacher can gear the lesson to the student and communicate at his level of comprehension. This necessitates making decisions about the complexity of the content, the breakdown of the learning into manageable portions, the degree of abstraction to be used, and the examples and modelling that could be employed. How will you, the observer, know that the lesson is at the correct level of difficulty for these students? One indication would be the number of student questions about the meaning of what has just been presented. Do students appear to be confused or frustrated as they listen? How quickly and accurately can they do the follow-up assignment?

Well-Organized Lessons

Once content decisions have been made, two further decisions must be taken. Sequencing involves arranging the order of the content so that the lesson proceeds in logical steps. Research indicates that this behavior is especially important for low socio-economic students who benefit from direct teaching in the mastery learning mode. Brighter, high socio-economic students do not appear to require such a tightly organized approach to succeed.

Structuring the lesson provides a format that includes beginning the lesson by sharing its purpose and objective with students (providing an "advance organizer," Ausubel; or an "anticipatory set," Hunter.) Main ideas are emphasized and linked to prior knowledge students possess and to examples in everyday life. The lesson becomes more meaningful to the student when such links are made. The teacher summarizes the main points of the lesson at the end ("closure") so the student can make the transition to the next stage of the lesson - the application of new learning. Teachers need to pre-plan the beginnings and endings of lessons, for the organization and structure provided to students help to develop a clear understanding of the information.

Checking for Understanding

Students need a chance to double-check the set of understandings emerging from the lesson. Time can be provided for students to ask questions or the teacher can take a more proactive role and question students about aspects of the learning. Once the set of directions has been given, the teacher should spot check to see if students know exactly what to do. Asking a student to repeat the directions (or the main points in the lesson) can be very revealing. Evidence of double-checking with students is an indication of the teacher's concern for clarity. ("Any questions or comments?")

Background Subject Area Knowledge

A teacher who has a solid background in a subject area has a grasp of content that enables him to make clear presentations of the content. The teacher who is well versed in the subject has a command of the lesson that is readily observable. There is a willingness to depart from the narrow path of the lesson plan to encourage student questions and discussion of the ideas. More appropriate examples can be provided by the teacher to enhance clarity of instruction.

Clarity Indicators to Look For

Here are some questions which will help you to focus on the indicators of teacher clarity:

- Did the teacher repeat or reteach information if needed?
- Was there a built-in review?
- Did the teacher monitor and adjust the lesson to provide more clarity?
- Did the teacher explain unfamiliar words or concepts?
- Was the vocabulary aimed at the students' level of comprehension?
- Was the rate of speech too fast? Too slow?
- Did the teacher use good enunciation?
- Was the volume and pitch of the teacher's voice appropriate?
- Did the teacher avoid using "distractors" such as "Oh", "Um", "Okay"? and avoid using vague terms?
- Did the teacher use voice inflection and gestures for emphasis?

- Was an objective provided to the students to orient them to the purpose of the lesson?
- Did the teacher use sufficient detail and specificity?
- Did the teacher check for understanding to make sure the topic was understood before moving on to the next part of the lesson?
- Did the teacher draw special attention to difficult points or stress the differences between things?
- Did the teacher give the students a chance to think about what was taught?
- Did the teacher show how to do the work or model the process on the finished product?

Video - Clarity

A description of teacher clarity is presented (VHS 741) followed by four examples (VHS 783 - 875).

3/4" 616
VHS 783
Illustration A - Grade 11, Biology
Yours ________

Peter uses the chalkboard to organize information two-dimensionally. "You can classify indicator organisms three ways: tolerant, facultative and intolerant. . . . will indicate increasing degrees of water purity. Here you have clean," he points to the list, "and here, contaminated water."

3/4" 631
VHS 802
Illustration B - Grade 12, Math
Yours ________

Ted looks at the homework assignment from yesterday (Set E, number 1). He circulates to check that everyone has the correct answer (zero minus 10i). Most students do but Ted notices several answers that are not correct. He decides to do the question for them on the chalkboard.

3/4" 643
VHS 819
Illustration C - Grade 1, Language Arts
Yours ________

Helen reads an Emily Dickinson poem with the class. They have studied the poem before and are almost able to recite it from memory. Helen blanks out some of the words and the students are to create their own poem by inserting new words. First, she models how it might sound by thinking through an example with the students. She explains that students are to chose to do a long or short version and will pick a long or short sheet of paper accordingly. They line up to get a paper, then go to their desks and begin.

3/4"	668
VHS	852
Yours	

Illustration D - Grade 8, Science

Ric explains the underlying structure of Niagara Falls. He draws a diagram on the chalkboard and uses gestures as he explains how the patterns of erosion cause the water to fall straight down. "The rock always wears off underneath in the back wash. The bottom erodes, then the top erodes, then the bottom erodes . . ."

Instrumentation

Teacher demonstrates adequate speech skills

1	2	3	4	5	Not Observed
Low		Med		High	

Notes

- can be heard easily
- speaks at appropriate pace
- uses correct grammar
- uses correct pronunciation (accents on correct syllables)
- avoids repetitive words and phrases ("You know," "Okay")
- explains new words and uses them in context

(Adapted from MacCannell and Young, 1980.)

Teacher prints and writes legibly on chalkboard, overhead projector, and charts

1 Low	2	3 Med	4	5 High	Not Observed

Notes

- forms letters neatly
- prints or writes words that can be seen at the back of the room (large enough size)
- uses contrasting colors, or dark enough felt pens or chalk
- uses correct spelling
- uses correct punctucation

(Adapted from MacCannell and Young, 1980.)

Teacher sequences learning during presentation of the lesson

1	2	3	4	5		Not Observed
Low		Med		High		

Notes

- moves from concrete to abstract (hands on to symbols, blocks to numerals)
- moves from content of previous lesson(s) to new content
- relates student's personal experiences to new content
- moves from oral to written work
- ends lesson by summarizing main points in the lesson (closure)

Teacher furthers instruction through use of AV media
(eg chalkboard, pictures, films, charts)

1	2	3	4	5		Not Observed
Low		Med		High		

Notes

- uses materials that support the purpose of the lesson
- explains to students why supplementary materials are being used
- arranges materials so all children can see and hear
- operates projection equipment efficiently (if used)

(Adapted from MacCannell and Young, 1980.)

ASSIGNING SEATWORK AND HOMEWORK

USE: When teacher presents a seatwork or homework assignment
PURPOSE: To see if teacher's instructions are clear and complete

Each time teacher presents seatwork or homework, code as many behavior categories as apply.

BEHAVIOR CATEGORIES

A. DEMONSTRATIONS AND EXAMPLE PROBLEMS
1. No demonstration was needed or given
2. No demonstration was given, although one was needed
3. Teacher demonstrated or called on students to do so. Activity was demonstrated in proper sequence, with no steps left out
4. Demonstration was poorly sequenced, or steps were left out
5. Each step was verbally described while being demonstrated
6. More verbal description should have accompanied the demonstration
7. Demonstration too long or complex; should have been broken into parts

B. CHECKING FOR UNDERSTANDING
1. The teacher never asked whether directions were understood
2. The teacher asked if the students understood, and no one said they didn't
3. The teacher called on one or more volunteers to demonstrate understanding
4. The teacher called on one or more non-volunteers to demonstrate understanding
5. The teacher failed to call on any low achievers (bottom 1/3 of group) to see if they understood

C. DEALING WITH CONFUSION

How did the teacher respond if one or more students was confused?
1. No one was confused
2. The teacher repeated directions and demonstrations, made sure everyone understood
3. The teacher repeated directions and demonstrations, but didn't make sure everyone understood
4. The teacher promised individual help to those who needed it before starting work
5. The teacher delayed giving help ("Try to do it yourself first")
6. The teacher told students to get help from other students
7. The teacher failed to deal with the problem directly, student remained confused, teacher never specifically told him what to do about it.

D. CLARITY ABOUT SPECIFICS OF ASSIGNMENT
1. Students were not clear about which problem or pages were assigned
2. Students were not clear about which problem or pages were assigned
3. Students were not clear about what to do if they needed help
4. Students were not clear about what was allowed if they finished

CODES

	A	B	C	D
1.	3,5	2	1	
2.	3,5	2	1	
3.	3,5	2	1	
4.				
5.				
6.				
7.				
8.				
9.				
10.				
11.				
12.				
13.				
14.				
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20.				
21.				
22.				
23.				
24.				
25.				
26.				
27.				

Looking in Classrooms-Second Edition, Thomas Good and Jere Brophy, New York: Harper and Row, Publishers. 1978. page 376.

CHAPTER THREE - MODULE FIVE

BEGIN/STOP SPEAKING

(Task Oriented/Businesslike Orientation, Time on Task)

> **"Teachers should not begin speaking to the group until all students are paying attention. Teachers should stop speaking or should instruct a contributing student to stop speaking until all students are paying attention."**

We have already emphasized the importance of getting student attention before beginning to speak. Illustrations have been provided in the context of Transitions and Signal to Start. The teacher who waits for this attention before beginning a lesson reinforces this expectation for student behavior.

On occasion, when a student is making a contribution (reciting a poem or giving an answer to a question) the teacher may have to stop the student until all peers are listening. This promotes respect for the contributions of class members. When a teacher has to regain student attention, many of the low-key techniques (see page 2-27) are appropriate. If a teacher is content to speak while three class members are talking, this shows students that it is not necessary to stop (and that the teacher does not mean what (s)he says). By the time six students are talking while the teacher is talking, at least 20% of the class is not paying attention to instruction. The teacher should halt proceedings and regain full attention. If it is worth saying, then all students should hear it.

Video - Begin/Stop Speaking

A description of this behavior is provided on Tape 3-2 (VHS 875). Five examples showing the teacher waiting for attention before starting are included. There is a concern shown that students listen to each other and take turns answering.

3/4"	699
VHS	896
Yours	

Illustration A - Grade 5/6 Language Arts

Jim tells the students that before they begin to read he wants to give them something to take home. "Pay attention please. Pens and pencils down." He waits. "Thank you. Before we read I have two letters that have to go home . . ."

3/4" 704
VHS 903
Yours ______

Illustration B - Grade 2/3, Language Arts

Heather begins a lesson with the grade two's. "Put pencils down. Just for grade two. Charlie, when you have time take out your _______. Pencils down. Amanda. Eyes here. I want to see all eyes here. Awake? I want to see them open. I see someone still with a pencil in hand." She whispers to someone to "Put away in your desk, please now" . . . "Thank you. I'm going to show you the jingle."

3/4" 716
VHS 920
Yours ______

Illustration C - Grade 12, Math

Ted interrupts the class as they work on math independently. "Could you stop what you're doing and look up here?"

3/4" 719
VHS 925
Yours ______

Illustration D - Grade 1, Math

Students are arranging their number cards in order and will read the correct order to the rest of the class. The group tells the teacher they are ready. Faye says, "Excuse me. Just a minute. Hold it guys. Let's wait for people to be ready." When all is quiet, she asks the group to begin speaking.

3/4" 726
VHS 935
Yours ______

Illustration E - Grade 1, Language Arts

Helen is explaining that although there are many different kinds of snakes, they all belong to the snake family. "A Boa Constrictor and a Rattlesnake are both snakes. (A call out interrupts). Pam, I'm sorry. I didn't hear you . . . (Pam speaks. A call out interrupts again). Excuse me, Pam was speaking . . . Yes, Farrah.

Instrumentation

Teacher helps children listen to one another and react appropriately

1	2	3	4	5	Not Observed
Low		Med		High	

Notes

- asks child to speak louder rather than repeating his comment to the class
- asks questions which require more than one answer
- asks student to react to other student's answer
- encourages controversy with regard to ideas
- encourages children's respect for each other's ideas
- gathers several answers before reacting to accuracy
- does not repeat student answers

(Adapted from MacCannell and Young, 1980.)

CHAPTER THREE - MODULE SIX

LARGE GROUP INSTRUCTION

(Teacher Centered/Direct Instruction, Time On Task, Academic Learning Time)

> **"Teachers should spend at least one-third to one-half of their time instructing larger groups of pupils (more than eight pupils). When they do teach smaller groups or individuals, they should take steps to ensure that the other pupils in the class have work to which they can attend."**

Maximizing Teacher Contact

Data from observational studies of academic learning time indicate that students maintain high levels of involvement when the work itself is of interest and when they are held accountable for their performance. Students exhibit lower percentages of engaged time when working independently for long periods of time. Interaction with the teacher provides academic feedback and motivation to continue working. The more time spent actively involved with the teacher, the greater the chances of increased academic learning time.

Not that many years ago, teachers were urged to individualize instruction. Some classrooms began to resemble correspondence schools where pupils checked in with the teacher and were given many assignments tailored to their ability and interest to complete independently. This presumed the student would persevere and complete the assignment, and some students did. Others spent a lot of time "in neutral" (Good and Brophy) waiting for the teacher to check by again. The pendulum has swung in the other direction and large group instruction is recommended for the major portion of teaching time. This should be followed by assignments that are based on the material but that are differentiated to suit the various ability levels in the classroom.

When smaller groups of individuals receive instruction from the teacher, sufficient attention has to be given to the quality of seatwork for the remainder of the class so it is, indeed, a profitable use of time. The success level of at least 80% should be built into the individualized assignments and these should have obvious connections to the large group lesson and to previous work students have mastered.

Regrouping

In many classrooms where teachers do work with smaller groups all year, these groups have been formed in September and their membership remains static all year. In instances where teachers have underestimated the student's ability, he may be "stuck" in a group with lower ability students for a whole year. Students do change, and teachers should restructure groups to reflect this. Flexible group structures, which are designed to meet particular short-term learning goals, help to avoid labelling students and keep the teacher tuned in to changes in individual students.

The teacher does have a better chance of monitoring all students and keeping them directly involved in learning when delivering large group instruction, and for this reason it is recommended that teachers include it as part of their daily teaching. Well-designed, independent seatwork also serves a very useful purpose. The effective use of both techniques enables the teacher to keep more students actively participating for more of the school day and to tailor assigned work for the individual student.

Video - Large Group Instruction

A description of the rationale behind large group instruction is presented (Tape 3-2 - VHS 941). No videotaped examples are included.

CHAPTER THREE - MODULE SEVEN

VARIETY IN TECHNIQUES

(Variability Of Instruction, Flexibility, Understanding Of Instructional Goals, Pace Of Instruction)

> **"Teachers should use a variety of instructional techniques ... adapting instruction in an attempt to meet the learning needs of the individual student. Examples of some instructional techniques are: varying group size, lecture, discussion, use of audio-visual aids."**

Preferred Style

In the continual search to strike a responsive chord in all students, the teacher employs many different instructional methods. Students do seem to have preferred modes of learning. Some learn best in a very structured situation while others experience success using a discovery learning approach. This does not mean that one approach is better than another but that a variety of instructional techniques should be used. The current emphasis on learning styles supports this belief that teachers need to realize the variety of preferences and need to explore alternate ways of presenting instruction.

Literature on right and left brain hemispheres strongly suggests that each student favors a particular approach to a learning task. When this student and a teacher who uses a complementary teaching style work together, the student receives individualized instruction well suited to his needs. Teachers must try to enlarge their repertoire of teaching styles in order to reach all students. If one strategy does not work for some students, presenting the material in another way may make the difference. Teacher flexibility in tailoring instruction to individual students is to be cultivated and supported.

Variety used in teaching presentations also maintains student interest and attention. If time permits, a group work assignment can allow students to learn the same material that could otherwise be presented more quickly in a lecture, but the side benefits include exercising communication skills, co-operating with fellow students, and enjoying learning. Group size and membership depend on the purpose of the activity, the nature of the subject matter (and the coping skills of the teacher).

A teacher who uses a set format for lessons becomes very predictable and somewhat uninteresting. Students know when it is safe to tune in and out of instruction. A change in pace or delivery helps to keep students involved and attentive.

Variety in teacher's clothing, voice modulation, and use of audio-visual support materials is noticed and appreciated by students. Today's student is accustomed to multi-media input and flashy presentations from television and computers, and teachers have to compete for student attention. Variety for its own sake is not being advocated but rather the refinement of many alternative methods of delivery that will help the teacher to individualize instruction to meet particular student needs and will add interest to lessons.

Video - Variety in Techniques

A description of why teachers need to vary their use of instructional techniques is given on Tape 3-2 (VHS 961), and is followed by five examples showing a variety of techniques (VHS 985-1060).

3/4" 763
VHS 0985
Yours ______

Illustration A - Grade 1, Language Arts

As Faye circulates she encounters a student who is trying to spell the word "once." She says, "Pretty close. You know how to spell 'once'? It's like number one and a C squeezes in. See number one up there?" She points up to a wall chart. "Come on over here and I'll show you what happens." She brings the student to the chalkboard and prints the word 'one' on the board. "One day number one went for a walk . . . Who do you think was coming to see him? . . . He let the C pop in, so 'one' became 'once' . . . So if you need to spell 'once', think of 'one' with a C popping in."

3/4" 776
VHS 1004
Yours ______

Illustration B - Grade 9, Social Studies

Ron uses a modelling technique to present a factual lesson. . . "Peter the Great needed a show place so he took a huge area of land, went up to the peasants, and destroyed their houses."

Illustration C - Grade 7, Science

3/4" 781
VHS 1012
Yours ______

As a way of checking to see that their answers are correct, Merv asks his students to do the following: "May I have your attention please, all of you. What I would like you to do for the next five minutes is to read your answers to your neighbor. Take your red pen and check those answers. If you have different answers, discuss them and come to some conclusion about them."

Illustration D - Grade 1, Math

3/4" 792
VHS 1024
Yours ______

Helen is working on sequencing numbers from 1 to 100. "Okay, let's start the game for real. This has to do with numbers between 0 and 100. Seven tens and no ones, Pam?" Pamela answers correctly. "Pamela may give the next question." Student asks a question demanding the answer 100 but has some difficulty posing the question. Helen helps her structure it the correct way . . . "Which way would you like to give it?" Pamela asks a student who answers correctly and who, therefore, gets a turn to ask the next question.

Illustration E - Grade 7, Art

3/4" 811
VHS 1053
Yours ______

Ron uses a variety of activities to give his students practice in sharpening their powers of observation. "You will have an instantaneous flash view. . . You will have to remember the picture in your mind . . . Ready? As quick as I can go." He shows the picture to the class. "Alright, I want to know what you saw . . . Six circles?"

Instrumentation

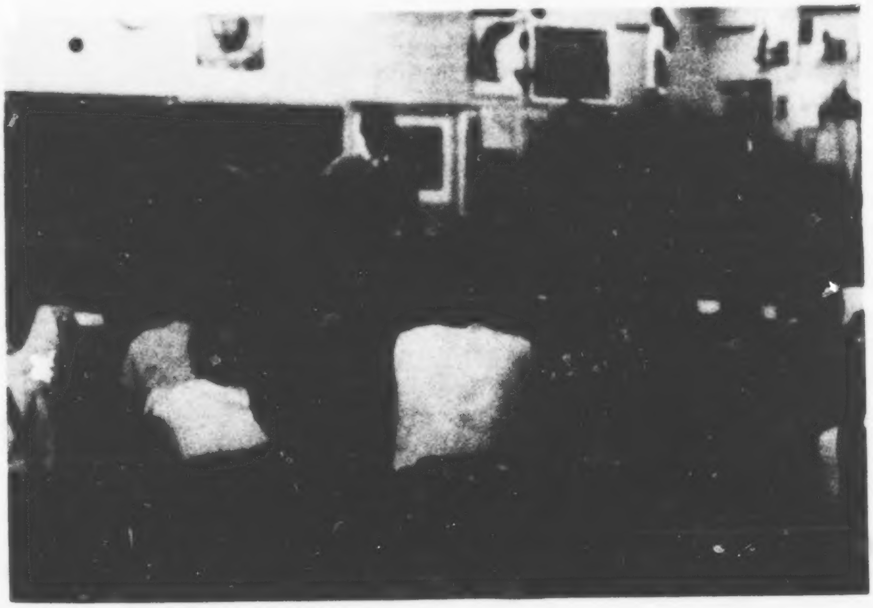
Teacher takes a variety of roles in relation to method

1 Low	2	3 Med	4	5 High	Not Observed

Notes

- motivator
- discussion leader
- presenter of information
- organizer of group work
- facilitator/resource person
- questioner

(Adapted from MacCannell and Young, 1980.)



Variety of Teaching Methods

USE: Whenever the class is involved in curriculum-related activities
PURPOSE: To see if teacher uses a variety of methods in teaching the curriculum

Each time the teacher changes activities, code the time and the type of activity.

BEHAVIOR CATEGORIES

A. *OBJECTIVES*

What is teacher doing?

1. Introduce new material
2. Review old material
3. Give or review test
4. Preview or directions for next assignment
5. Checking seatwork in progress
6. Other (specify)

B. *METHODS*

What methods are used to accomplish objectives?

1. Demonstration or diagram at blackboard
2. Lecture
3. Prepared handouts (diagrams or teaching aids)
4. Media (filmstrip, slides, tape, record, etc.)
5. Questioning students to check understanding
6. Inviting and responding to student questions
7. Focused discussion (prepared, sequenced questions)
8. Unfocused discussion (rambling, no specific objective)
9. Students take turns reading or reciting
10. Drill (flashcards, math tables, chorus questions)
11. Practical exercise or experiment
12. Seatwork or homework assignment
13. Field trip, visit
14. Game, contest
15. Other (specify)

NOTES:

1-11: Reading groups
15: Social studies
16: Spelling (Went around room twice, then had spelling bee)

	START TIME	CODES *A*	CODES *B*	*ELAPSED TIME*
1.	8:30	2	5	10
2.	8:40	1	1	10
3.	8:50	4	1,3	5
4.	8:55	Transition		5
5.	9:00	2	5	8
6.	9:08	1	1	11
7.	9:19	4	1,3	5
8.	9:24	Transition		6
9.	9:30	2	5	10
10.	9:50	1	1	12
11.	10:02	4	1,3	8
12.	10:10	transition		5
13.	10:15	Recess		15
14.	10:30	transition		3
15.	10:33	1	7	27
16.	11:00	2	10,14	25
17.	11:25	transition		5
18.	11:30	Lunch		
19.	:			
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40.	:			

Looking in Classrooms - Second Edition. Thomas L. Good and Jere E. Brophy, New York: Harper & Row, Publishers. 1978. page 372

Chapter Four

Verbal Interaction Skills

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CHAPTER FOUR - VERBAL INTERACTION SKILLS

INTRODUCTION

Chapter Four deals with the delineation of verbal teaching skills deemed to be effective from the research in teaching literature. This chapter concentrates on observing and recording these teaching behaviors.

Much information is transmitted during a teacher's verbal interaction with students. After approximately 10 hours of observing and recording these exchanges, an experienced observer of verbal interaction should be able to identify those students for whom the teacher has high/low academic expectations and towards whom the teacher displays differing degrees of affection and warmth. This information is in addition to other important sources of information revealed during verbal interaction such as the teacher's use of questioning skills, the type of feedback provided to students, and how much student-initiated interaction is encouraged and accepted by the teacher. The above kinds of information do not include the specific subject area content which can serve as the focus of observation on its own merits.

Purpose of the Chapter

It is by concentrating on the observation and analysis of classroom verbal interaction, without direct reference to content, that the user of this learning package can begin to develop a useful set of observational skills which are neither grade level nor subject area specific. Thus, they should be applicable and usable in almost any classroom teaching situation during which the teacher is engaging in verbal interaction with students. The main purpose is to assist the administrator in developing a usable set of skills for the objective observation and recording of verbal interaction skills used by classroom teachers.

Dyadic Verbal Interaction

The term "dyadic verbal interaction" simply denotes a verbal exchange between two people; for the purposes of this chapter, the teacher and one student. As in a tennis match, the next move by one player is dependent on the last move of the other player. Thus the input of both participants should be observed and recorded. By considering all the dyadic verbal interactions which occur between the teacher and each individual student (in a public setting), the observer can develop an overall impression of the level of proficiency in verbal interaction skills used by the teacher with students.

These skills can be subdivided and considered individually. For example, a teacher may pose challenging questions and provide supportive feedback to students but may lack skill in dealing with situations where the wrong answer is given, especially with certain students. This recorded information can be examined to assess whether this may be a skill area in which the teacher needs additional work.

General Objectives Accompanying the Verbal Interaction Chapter

During the teaching of a lesson the administrator will be able to demonstrate the acquisition of specific skills necessary for observing and recording dyadic verbal interaction in an objective way. This information will be recorded on an instrument designed for this purpose and the administrator will reach an acceptable level of proficiency in using this instrument. This general objective can be subdivided more specifically to include the following:

- The administrator will be able to identify and record the question types employed by the teacher during the lesson (e.g., Product question, Process question, Choice question and follow-up Probing questions).
- The administrator will be able to identify and record the mode of selection for the student (e.g., volunteer, was pre-selected).
- The administrator will be able to identify and record the quality of the student answer (e.g., right, wrong, no answer, partially correct).
- The administrator will be able to identify and record whether the initiator of the interaction was the teacher or the student. (The proportion of student-initiated interaction is sometimes indicative of general classroom climate, or of the philosophy underlying the teacher's style).
- The administrator will be able to identify and record the non-verbal components of the above concerns (for example, the length of "wait" time after the question is asked, the tone of voice used, the seating arrangement).
- The administrator will be able to observe and record the grouping mode in which the foregoing verbal interaction occurred (e.g., small reading groups may be more appropriate for and conducive to Process questions. A whole class math period, depending on the purpose of the lesson, may lend itself best to Product questions).

Video - Verbal Interaction Skills Overview

An overview of the verbal interaction chapter is presented on tape 4-1 (VHS 0021) (Accession Number).

CHAPTER FOUR - MODULE ONE

SELECTION OF STUDENTS

(Questioning Techniques, Teacher's Expectations)

> **"Teachers should avoid calling on volunteers more than 10% or 15% of the time during question-and-answer sessions. It is also advisable to discourage pupil 'call outs.'"**

Distribution of Teacher Verbal Interactions

How and why teachers select students to answer questions is an interesting study in itself. Teachers aim to involve all students and usually feel they have spread their attention around equitably. However, observers often note that this is not the case and certain students can be overlooked on a regular basis.

The simple technique of drawing a classroom map showing the location of students (see page 4-10), and then using this map as a data collection instrument, can give you information of this kind. A tally mark placed in a "desk" would serve as an indicator of where (to whom) the teacher contacts are being made. Likewise, a class list of names can be used if the observer is able to identify the students.

The teacher is frequently surprised at the results, for some students regularly escape the teacher's attention. A "map" is particularly interesting because the physical location of the student may help to account for this lack of teacher attention. Adams and Biddle (1970) suggested there was an "action zone" in a classroom and students seated outside it would receive less teacher attention. Depending on the physical arrangement of the room and where the teacher is positioned (remains at front or teaches from various locations during whole-class instruction), an "action zone" (and an "inaction" zone) may be in operation, unknown to the teacher. A reconsideration of the placement of the furniture, facilitating teacher movement around the classroom, may be a step in correcting this situation.

The child who is "missed" frequently will internalize the message that his contributions are unimportant and unwanted. Other students are masters at purposely avoiding teacher attention; because they are shy or uncomfortable answering questions in a large group setting they have developed successful skills for avoiding interactions with the teacher.

The teacher can fall prey to the eager, alert student who enjoys participating verbally and who indicates enthusiasm for doing so (volunteers with hand up). This type of student frequently provides correct answers and the teacher finds this a rewarding confirmation of a lesson well taught (true at least for the brighter students). In addition, such a student aggressively creates response opportunities for himself by initiating comments or questions that the teacher accepts because they are worthwhile contributions to the lesson. This monopolization of instructional time should be examined for it is at the expense of participation of other class members who may be more in need of verbal exchanges with teacher and whose contributions are also of value.

Expectancy Effects on Selection of Students

A great deal of research has been conducted on teacher expectancy effects, and clear tendencies do emerge from the literature. Teachers do hold differing expectations for students and provide instruction to meet individual needs as they have perceived them. In any class, whether heterogeneously or homogeneously grouped, the teacher is able to rank order the students in terms of performance expectations held for them. Many teachers do not choose to rank students or to concentrate on differences, but these perceptions do influence teacher behavior. This ability to recognize individual differences and gear instruction to suit these needs is a key skill but one must guard against communicating this information inappropriately to all students in the class.

In any class, therefore, there would be a top third, middle third, and bottom third (for example) of students, arranged according to the teacher's perception, on a performance expectancy ranking list. The top third is the recipient of the highest teacher expectancy for success and may include the students (described above) who interact most successfully and frequently with the teacher during academic discussions. By contrast, the bottom third is often short-changed and subconciously placed in a position where a lower standard of performance is actually demanded. Eventually, this standard sinks to an even lower level.

The challenge to this group of students may be noticeably less. Over time, students in this group accept a lower standard of performance for themselves and do not try to keep pace with other students or to better their own performance. They conform to the perception the teacher has formed and communicated - that of a less successful student. It is of benefit for a teacher to rank his/her students and particularly to identify those placed in the "bottom third" in order to monitor the teaching contacts afforded to them. Additional information provided by a classroom observer regarding the types of questions posed, the number of response opportunities, types of teacher feedback, etc., alert the teacher to the situation. This is a first step in raising teacher expectations to a more appropriate and challenging level for certain students who might otherwise coast through the year. The writer heartily recommends two books that deal with teacher expectancy, dyadic verbal contacts between teachers and students, how to collect this information, and how to interpret data from the verbal exchanges. They are written in a very readable, straightforward manner and summarize findings from extensive classroom observational research. They offer many useful suggestions to classroom supervisors.

LOOKING IN CLASSROOMS (THIRD EDITION)
Thomas L. Good and Jere E. Brophy.
Harper and Row, New York, (1973, 1978) 1984

and

TEACHER-STUDENT RELATIONSHIPS: CAUSES AND CONSEQUENCES
Jere E. Brophy and Thomas L. Good
Holt, Rinehart & Winston, Inc. 1974

Framing the Question

Another skill included in the Teacher Effectiveness program is Framing the Question. The manner in which the question is posed will indicate who should answer it and the appropriate way to respond. For the moment, let us assume the question is a challenging academic one. As part of the question, the teacher should provide cues to the student that tell the student what to do and how to answer:

- Does the student put up a hand and wait to be chosen?
- Does the teacher expect the whole row to say the answer together?
- Will each student share the answer with a neighbor and be ready to tell the neighbor's answer to the teacher?
- Will the student be called upon third, after the first two people in the row?
- Will the student call out the answer as part of a brainstorming activity?
- Will the student write the answer on a jotting pad for the teacher to see as (s)he passes by?

Some of these methods require participation by more than one member of the class at one time - some involve the whole class. Constant use of choral answers would be no more desirable than an exclusive use of individual volunteers. The mixture of response opportunities provided keeps more students attentive and actively participating in the lesson.

Students may know they are "off the hook" once they have given an answer and will rest on their laurels and tune out. A teacher who poses several questions to one student during the course of the lesson, or who asks a student to agree or disagree with a classmate's response, holds students more accountable throughout the class period.

Wait Time

In certain situations (like math drills or spelling practice) the teacher expects a rapid answer and may turn to the next student when this is not forthcoming. In most classroom question-and-answer sessions the use of wait time (a) bumps up student accountability by not selecting the student until most (all) have had a chance to prepare an answer and (b) allows for the necessary thinking time for more of the students. If questions and answers occur too rapidly, slower students have not even digested the question - let alone formulated an answer - and are not benefitting from these verbal exchanges.

Another place where wait time may be needed is after the student has been selected.

e.g., Pose question - wait - select student - wait . . . .

By waiting for this particular student to respond, the teacher communicates that the student is expected to answer. Shy students take advantage of teacher discomfort at this point and may remain silent or say "I don't know" in hopes that they will be rescued by another student. Instead, the teacher should rescue this student by helping him to arrive at a successful answer, if at all possible (see Using Sustaining Responses, page 4-13). Skillful teachers are able to accomplish this and not embarrass the student in the process.

Teachers feel they allow more wait time than they actually do. An observer can help to identify how much and how adequate the wait time is. (Audiotaping the lesson is a useful technique.) By mentally counting "one-one thousand, two-one thousand, . . . five-one thousand" (or using some other device) a coder can record how many seconds of wait time a teacher employs before naming the student who will answer the question. Some practitioners recommend five seconds, others nine seconds, but most teachers use little more than one second before choosing a student. Five seconds seem a lot longer when you are the one asking the questions! Initially, these pauses seem to make both the teacher and the student uncomfortable. When a teacher begins to insert more wait time in question-and-answer sequences (s)he can expect to have to alert students to this change in procedure and the reasons for this change, and to solicit their co-operation in adapting to this alteration. The writer has observed this skill used extremely well. Neither the teacher nor the student found the pauses awkward.

Call Outs

Call outs that are not wanted by the teacher interrupt the thinking process and rob other students of the chance to arrive at the answer on their own. Worse still, if the teacher accepts the call out (s)he is behaving inconsistently with the previously expressed desire that students put up their hands and/or wait to be selected by the teacher. This simply reinforces the student who called out and tells others that the teacher does not mean what is said. Of course, on appropriate occasions when spontaneous answers are being sought, the teacher is glad to accept call outs. To apply the rules inconsistently - eg., when low expectation students call out - is an additional way of communicating expectations. This expectation of how to respond should be clear to students and can be included in the body of the question itself (Framing the Question).

Allowing Students to Buy Out

When questions are preceded by certain phrases, students can rightfully conclude the question does not apply to them.

> "Who would like to explain how this process works?
> Who is able to solve this problem?
> Who knows the capital of Alberta?"

Students may "buy out" because they do not know, want to, etc., and such questions do not appear to be directed to them. Perhaps a subtle and picky thing - and certainly not intended-but such expressions add little to the question (except verbiage) and may actually discourage students from risk-taking on those occasions when they are not absolutely sure but would like to hazard a guess and contribute an answer.

Thus, through careful framing of the question, the teacher can vary response opportunities, build in accountability and active student participation, as well as pose an intellectually stimulating question in the first place. Questioning is an important teaching skill which requires careful planning and execution.

Practice in coding how students are selected by the teacher is given in Chapter Four of the Manual (page 4-60). The segment of the Dyadic Verbal Interaction Instrument entitled "Pupil Selection" offers four categories:

Pre-Selected	-	teacher names student before asking question
Volunteer	-	teacher asks question and chooses a student who has indicated a willingness to respond
Non-Volunteer	-	teacher asks question and chooses a student who has not indicated a wish to respond
Call out	-	teacher asks question but before (s)he can designate a student to answer, a student seizes the chance, provides an answer, and the teacher acknowledges the contribution

Only the Pre-Select coding category is fool-proof because the student's name is spoken first. To code any of the others, the observer must be watching closely to see a hand up, non-verbal choosing (by pointing, nodding), or some other method of selecting students.

It is fascinating to ponder whether the ways a teacher selects students for answering questions are tied to the performance expectations held for the students. While some of these connections are purposeful teacher behaviors, others operate at the sub-conscious level and can be revealed through your coding results. The research on "teacher attitude to students", as described in Good and Brophy's books, is a most useful resource for helping teachers discover the underlying reasons behind differing amounts of verbal interaction with students.

Video - Selection of Students

First a description of the teacher behavior (selecting students) is discussed (VHS - 0071). Volunteers can tend to monopolize classroom interactions unless the teacher can involve students who are less eager to volunteer. Four examples follow (VHS 0122 - 0330).

3/4" 110
VHS 0122
Yours ____

Illustration A - Grade 12, Math

Ted does question number 3 on the chalkboard. "3+i and 1+i - so I'm at the division stage of complex numbers . . . I'll bring them together." Ted asks Miles to do both the first part and the second part. "I've taken a division question and put it in terms of a multiplication question." The teacher asks Colleen to provide some answers as he continues to solve the question at the chalkboard.

3/4" 0166
VHS 0185
Yours ____

Illustration B - Grade 1, Math

Helen asks the first question and then the student answering is allowed to select the next student to answer. Bonnie asks the question, "What has 9 ten's and 7 one's?" and chooses Otis. He answers correctly and poses a question, "What has 8 ten's and 8 one's?" and chooses Tara.

3/4" 210
VHS 0243
Yours ____

Illustration C - Grade 7, Math

Merv will solve the equation on the chalkboard so everyone can see it and put it in their scribblers properly. He asks Dean for the first answer. He asks students who think they have the right answer to the question (about the marbles) to put up their hands. He asks both Richard and Ron for an answer and then looks to see which is the more correct.

3/4" 250
VHS 0301
Yours ________

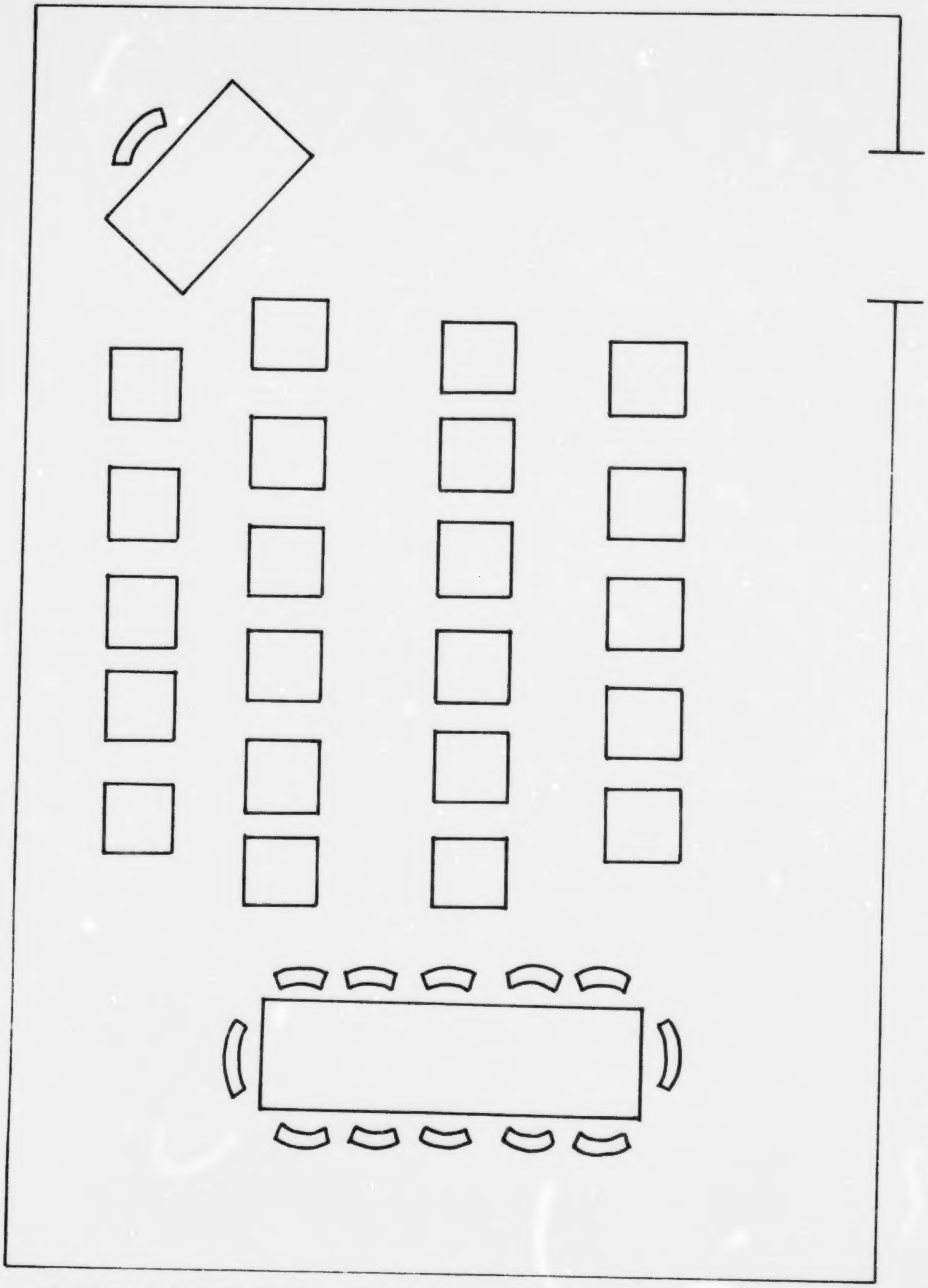
Illustration D - Grade 8, Science

Ric asks about the pathway of both a young and an old river. He asks students to put up their hands if they know the answer. Then he picks several students to provide answers about the V-shape or flat-shape of the river bed.

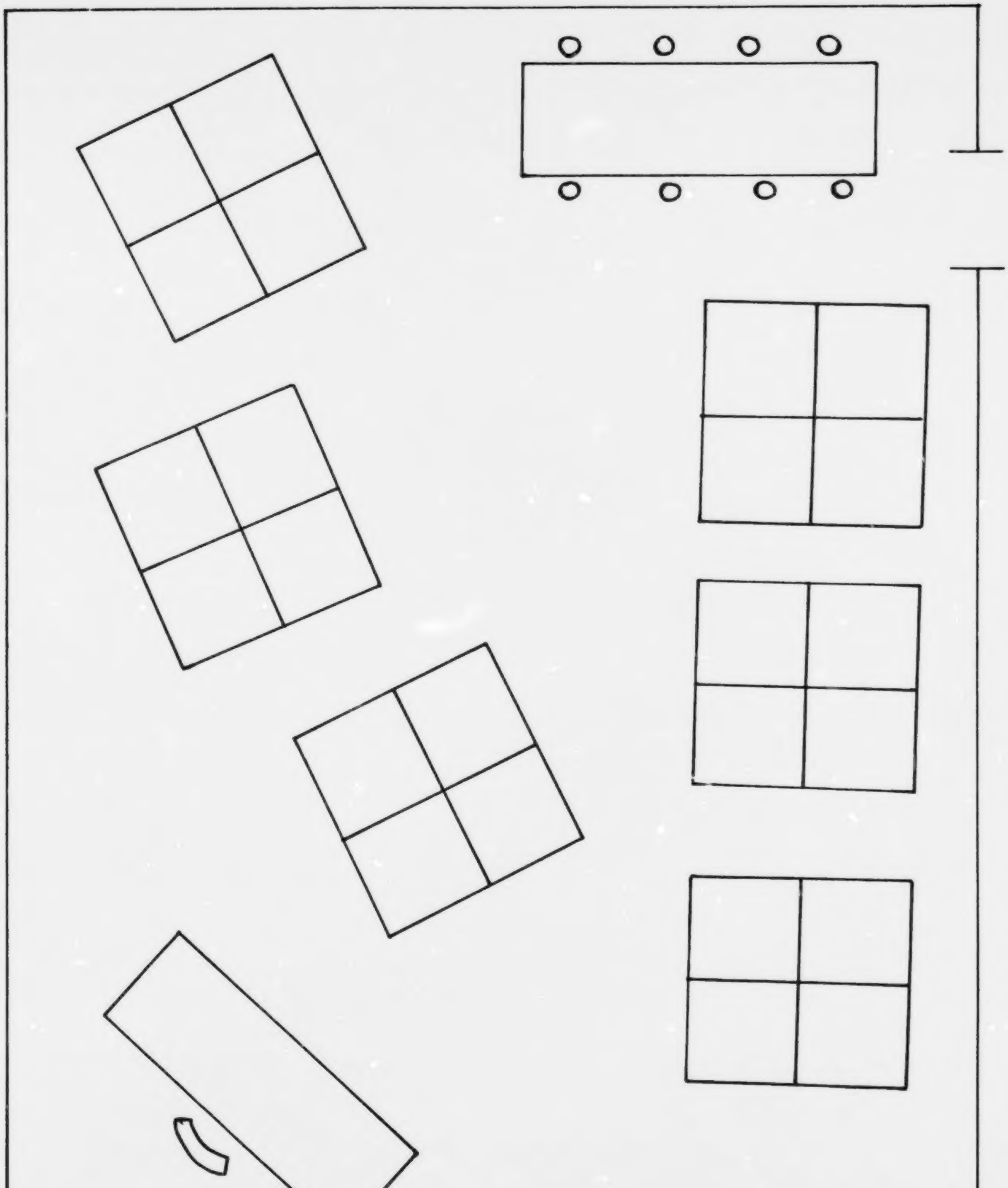
Instrumentation

A classroom map can serve as a data collecting instrument (see pages 4-10, 4-11, and 4-12). Student desks or quadrants of the room can be ticked when the teacher selects respondents. It is then relatively easy to see who has not received teacher verbal attention. Maps are also useful for charting the course of the teacher as she moves around the room (awareness) or assists students with their seatwork (monitoring).

As a first coding experience, it is recommended that the user of the package construct an appropriate map and use it to code the distribution and frequency of verbal contacts. You will find this a versatile approach as you could actually place a symbol for question types or selection mode right on the students "desk". You will find this task much easier to perform when sitting in a classroom (coding live) where all students can be seen at the same time but some practice can be obtained from viewing videotapes.



MAP OF CLASSROOM SHOWING LOCATION OF STUDENTS
MAP #1



CLASSROOM OBSERVATION MAP #2

CLASSROOM OBSERVATION MAP # 3

CHAPTER FOUR - MODULE TWO

SUSTAINING RESPONSES

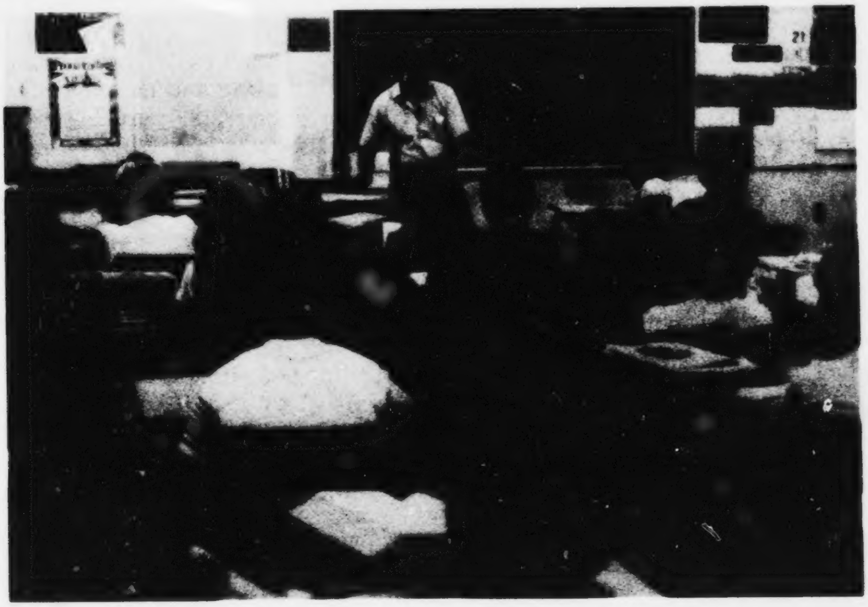
(Questioning Techniques, Feedback to Pupils, Praise and Encouragement/Criticism)

> **"The teacher should aim at getting the child to give some kind of a response to a question. Rephrasing, giving clues, or asking a new question can be useful techniques for bringing forth some answers from a previously silent pupil, or one who says, "I don't know," or one who answers incorrectly."**

Encouraging Risk-Taking

For many reasons, a student may not provide the correct answer to a question. He may simply not know the information, in which case the teacher can give the answer or ask another student. A student may know the answer but may pretend he does not, in hopes that the teacher will move on to another student. This student may feel very uncomfortable answering questions in front of the whole class. Certain teaching behaviors can discourage students from making a second attempt - or even a first attempt.

The teacher should develop a classroom atmosphere of mutual respect and co-operation. In such a classroom, students are assisted and supported by the teacher who provides hints, clues, and encouragement when they falter. When students do give a correct answer, the teacher should provide a "knowledge of results" and confirm that the answer is correct and/or outline the reasons why the answer was a good one. Constant academic feedback of this type is highly correlated with student achievement and provides real motivation for continued participation by the student. In such a classroom, "mistakes" are viewed as opportunities for learning.



Terminal and Sustaining Responses

If the answer was correct and the teacher has affirmed it and has initiated an interaction with another student, the teacher has provided a "Terminal Response" to the first student. The typical sequence in a terminal interaction is: question, student answer, teacher feedback, question to a new student. Any teacher behavior that assists students in reaching the correct answer (involving further verbal exchanges) and which prolongs the verbal contact with the student is called a "Sustaining Response." Even following a correct answer that the teacher has affirmed, a probing question could be posed that requires an additional answer from the student. This teacher response is "Sustaining" because it affords the student an additional opportunity to interact with the teacher. If the student answer is wrong, or partially correct, teacher feedback should be provided that shows why the answer is deficient and provides direction and encouragement for the student to refine the answer ("knowledge of results"). The real skill here is knowing how to pose the sort of probing question which will bring the question and answer sequence to a successful conclusion.

How Teacher Expectations Influence Selection of Student

Unless there are unusually extenuating circumstances, a student should be expected to answer questions during whole-class instruction. The teacher who avoids questioning certain students because incorrect answers are expected conveys to the student (and to the rest of the class) that this student has nothing worthwhile to contribute. The student's self-concept is low for (s)he directly experiences the teacher's low expectation that he is not intelligent enough to participate actively in the lesson. Unfortunately, his classmates notice that this student is seldom selected to answer. To "compensate," the teacher spends extra individual time with this student. The teacher must figure out how to pose questions to this child in a whole-class setting to help preserve his self-esteem and his willingness to try. This will require careful structuring of questions (stacking the deck) so that this particular student has an excellent chance of getting the answer correct in a public setting.

Another teacher behavior that can reveal low expectations held for a student is the feedback provided for student answers. The "brighter" student is expected to get the answer correct so more wait time is afforded, and expectant, pleasant facial expression and body language are displayed by the teacher. The student receives the benefit of the doubt as hints and clues are given. Conversely, the student for whom the teacher holds low expectations receives less wait time and if (as predicted) he does answer incorrectly, he may not receive as much encouragement to keep trying and may receive a reprimand in the process. The teacher's tone of voice can be noticeably different when questioning these two students. Watch for these subtleties when coding, as the teacher is often unaware of this observable difference in the treatment of students.

There is a good chance that the first student (high expectation) will answer the question correctly, thereby confirming that the intended learning is in place. There is an equally good chance that the second student will provide discouraging evidence of a lesson that missed the mark and that the prolonged interaction will interrupt the momentum of the class. The personal "rewards" to the teacher are greater when interacting with the first student, and the teacher's ability to "control" the flow of the lesson is greater as well (Cooper, 1977). Knowing the likelihood of complicating things by initiating an interaction with the second student, the teacher tends to avoid this pitfall during whole-class instruction. The "control" of the lesson slips away as the student takes the teacher off track. There is no easy solution to this dilemma, but teachers should be aware of the consequences of the choices they make to overcome the problem.

Using Sustaining Responses

A wrong answer provides a diagnostic opportunity for a teacher. If the answer represents a serious attempt by the student, then the incorrect information or faulty reasoning must be corrected. Perhaps other students have also had difficulty learning the material. It may need to be retaught. Sometimes teachers purposely select a student (benchmark) who, they feel certain, will not know the answer so they can walk through the thinking process with the student one more time. This provides another chance to model the process for other students who were unsure of the answer.

In general, "Sustaining Reponses" begin with the teacher providing a "Knowledge of Results" to that point. Part of the answer may have been right and this should be acknowledged. If the answer was wrong, the reasons why it does not satisfy the requirements of the question should be outlined. The teacher who uniformly gives such feedback to all students in a neutral tone and in a very businesslike way, keeps the focus on getting the answer corrected and not on the failure of the student. Assurances that, together, the teacher and student will achieve a successful conclusion are delivered in a friendly tone. Other students are actively discouraged from ridiculing the student who is experiencing the difficulty and, in turn, are assured that they will not receive negative feedback from peers. The freedom to make mistakes and learn from them enables students to benefit from these experiences.

The most frequent sustaining teacher behavior is the posing of an additional probing question. If there is doubt that the student has heard the question clearly, the question may simply be repeated. However, a rephrasing may be required, using vocabulary that is more readily understood. The teacher may pose a different question that asks for related information. A series of probing questions that successively eliminate wrong answers and lead the student to the correct answer could be employed. Prompting the student by providing clues that help him arrive at the answer may help to end the interaction successfully. As a last resort, the teacher may simply say the answer, quickly ask the question again, and have the student repeat the correct answer. Some accountability may be inserted at this point as the teacher indicates he will ask the student for that same answer again tomorrow or at the end of the class as an additional check for understanding.

The danger of asking another student to "help" by giving the answer is that the teacher may neglect to return to the first student soon after and provide a second chance with that question (or with another question likely to result in a correct answer). It may be more advisable for the teacher and student to end the interaction with the correct answer in the first place.

With higher order questions, it may be necessary for the teacher to build in part of a review as the student and teacher rework stages in the question. Examples and non-examples of the answer could be explored. The end result should be improved student understanding without embarrassment. "Productive" mistakes (Hunter) can actually leave the student feeling very confident. Most of us do not make the same mistake twice.

One of the main points needs re-emphasis. Students are expected to provide an answer. They will not be let off the hook but will be assisted by the teacher. The student who would rather "hide" will not enjoy this limelight forced upon him. He must be held accountable for an answer and if the interaction does not produce one the teacher should indicate that a return will be made: "In a few minutes, I'm going to ask you again." Over time, and with good teacher coaching, this student will feel more comfortable. The true test comes when this student starts to volunteer to answer. He then feels confident that he will suffer no humiliation if he happens to be unsuccessful.

Video - Sustaining Responses

A description of teacher behaviors involved in sustaining a response from a student is presented (VHS-0330). Five examples follow (VHS 0367 - 0561).

3/4" 309
VHS 0367
Yours ______

Illustration A - Grade 12, Math

Marilyn's students have been working on a question on their own. "Starting to get to you? Let's take a look." She asks Chris for an answer (which is wrong) and she asks 3 or 4 questions in succession so students can see the logic that needed to go into the thinking. Chris sees why her answer is wrong and she is able to provide the correct answer.

3/4" 340
VHS 0408
Yours ______

Illustration B - Grade 2/3, Language Arts

Heather helps a girl get the answer to question #3; "Why didn't Robbie have any friends?" Heather offers to provide a clue and asks to see the page in the reader where the answer can be found. She asks the student if she had only just moved into the city why wouldn't she have any friends? The girl answers that there hasn't been time enough to make friends yet, and gets the answer correct.

3/4" 372
VHS 0448
Yours ______

Illustration C - Grade 10, French

Denise coaches her students who are posing questions (using the passé composé verb tense) to each other. They need some help in constructing the questions and the answers. "Did you work yesterday? Two days ago I worked."

3/4"	412
VHS	0500
Yours	

Illustration D - Grade 7, Science

Merv reviews body wastes with the students. "Hands up if you can tell me the four main organs used in the excretory system . . . Corey?" One of the organs he provided was the small intestine. The teacher phrased the next question in such a way that the correct answer - the large intestine - was given by the student.

3/4"	431
VHS	0525
Yours	

Illustration E - Grade 1, Math

Helen helps a student figure out what number comes between 89 and 91. First she tries to show her on the number card but this is not too successful. The she asks the student to count up from 85, and the student says 90, in the right place. "There's your answer then. That's all it's asking."

Instrumentation

The following examples of instruments have been used in research studies and are presented as ideas you may wish to incorporate. Try using each example for coding verbal behaviors.

Teacher makes facilitating verbal responses.

1 Low	2	3 Med	4	5 High	Not Observed

Notes

- gives feedback in a supportive manner.
- probes to help clarify a child's ideas.
- gives knowledge of results (how right/wrong was the answer).
- pleasant accepting voice.

(Adapted from MacCannell and Young, 1980).

Feedback When Student Fails to Answer Correctly

USE: In discussion and recitation situations when students are answering questions

PURPOSE: To see if teacher is giving appropriate feedback to students about the adequacy of their responses

When a student is unable to answer a question, or answers it incorrectly, code as many categories as apply to the teacher's feedback response.

BEHAVIOR CATEGORIES

1. Criticizes
2. Says "No," "That's not right," etc.
3. No feedback—goes on to something else
4. Ambiguous—doesn't indicate whether or not answer is acceptable
5. Asks a student or the class whether answer is correct
6. Asks someone else to answer the question
7. Repeats question to same student, prompts (Well?" "Do you know?" etc.)
8. Gives a clue or rephrases question to make it easier
9. Asks same student an entirely new question
10. Answers question for the student
11. Answers question and also gives explanation or rationale for answer
12. Gives explanation or rationale for why student's answer was not correct
13. Praises student for good attempt or guess
14. Other (specify)

CODES

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3. 2,8
4. 2,10
5. 2,10

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Looking in Classrooms - Second Edition. Thomas L. Good and Jere E. Brophy, New York: Harper & Row, Publishers. 1978. page 375

CHAPTER FOUR - MODULE THREE

HIGH AND LOW ORDER QUESTIONS

(Questioning Techniques, Individualization of Instruction, Flexibility)

> **"Teachers should use an appropriate mixture of low and high order questions. Low order questions should be asked primarily when basic factual information is being dealt with, in order to ensure that a basis for high order conceptualization has been laid. Higher order questions can then be used to enlarge upon basic concepts."**

Pitching at the Appropriate Height

As with most of the teaching behaviors discussed in this learning package, the key word is "appropriate." A few years ago it seemed fashionable to recommend the extensive use of higher level questions (for their own sake). It may not be a suitable technique for certain types of lessons or for certain types of students. (Studies have been indicating consistently that it is most desirable to pose predominantly factual questions to elementary, low socio-economic students.) If the students are not able to handle the cognitive demands placed on them through higher order questions, the practice is not being used to any advantage.

It is entirely possible to gather questioning data that show the teacher has, indeed, posed a large percentage of higher order questions that were suitably worded and relevant to the teaching objective. Thinking of our tennis match analogy, if the reciprocal half of the data (student responses) was collected (and it may not have been) it might show that students consistently got the answers wrong because they did not know the basic information, or could not integrate pieces of information, or because they could not understand the wording or the thinking processes required. Full credit would be given to the teacher for asking a set of excellent questions on target but few of the students benefitted from the challenge. In this case, the mix of questions was definitely not appropriate and the teacher has not developed the more important skill of diagnosing the student level of cognition and understanding, and the skill of monitoring and adjusting her teaching to suit the circumstances. Hence, one can see the value of coding the student responses to teacher questions as well as the questions themselves. To reiterate, decision-making about when to use a skill is extremely important.

Teachers are sometimes guilty of asking higher level questions to the brighter students only. If the question is suitably structured and if the prerequisite factual knowledge is in place, higher order questions can be appropriately posed to students of lower ability. Students can be assisted in developing the reasoning process required to answer such questions. The process may take longer but they can still be encouraged to "think". This is an additional way that teachers communicate performance expectations to students.

Convergent Questions

The first decision you have to make concerns the complexity of questioning classifications to be used on your coding instrument. A good beginning would certainly distinguish between lower order (factual, product, convergent) questions and higher order (process, divergent) questions. The first type, known by many names (e.g., memory recall), is a question that elicits a short, factual answer. Generally, there is only one correct response.

> "What is nine times five?
>
> Who was our last premier?"

These "product" questions are asked to confirm that students possess necessary factual information. Teachers use such questions to help diagnose what students do know so new instruction can be pitched at an appropriate level.

Divergent Questions

Questions requiring more than a short factual answer can be of many types but, in our initial classification, can be labelled as "Divergent" (or "Process") if they require that the student process, integrate, or apply information in any way. Several different answers are possible and acceptable.

> "How could the newspaper convey this information?
>
> Why would a shortage of teak pose a problem for this factory?
>
> When would be the best time to involve staff members in the process?
>
> Explain, in your own words, the meaning of this short story."

Coders face a problem here because some questions sound like "Divergent" questions but are actually eliciting single-answer, factual information. Following a typical reading lesson the teacher could ask:

"In what ways did Mary show her discontent?

Why did Miss Muffet race away?"

The answer to such questions may be embedded in the reading text. It is wise to try to flip through the story the class has already read. In that way you can decide better whether these questions (which begin with "why") really have a single, correct answer, in which case they would be "Convergent" or "Product" questions. Answers to higher order questions that can be found in the text should alert you that these are only recall questions and they should be coded as lower order questions.

Evaluative Questions

Another type of question that is fairly distinctive is an "Evaluative" question. It asks the student to judge the worth or value of some item or piece of information.

"What is the best way to transport these instruments?

Do you think this qualifies as a good example? Why?

Are there more advantages or disadvantages in using automated billing?"

By initially sticking to three types a) Convergent, b) Divergent, and c) Evaluative, you can practise coding questions during classroom instruction.

* a) "What does the man do when he rings the bell?

b) Who are our community helpers?

c) Who is our most important community helper?"

and *

a) "Why was Madame Lafarge knitting at every execution?

b) What would have happened if Madame Lafarge had not been knitting at each group meeting?

c) Who was the strongest character in the novel, Sidney Carter or Madame Lafarge?"

and *

a) "Describe the main focus of a friendly letter.

b) How may ways can you think of to get a message to another person?

c) Which do you think is the most important communication medium?"

* (From a workshop prepared by James Gallagher, Oregon, 1966.)

Bloom's Taxonomic Levels

If your purpose is to work on questioning skills in greater depth, you will want to use more specific question categories. Perhaps the best known are those of Bloom and Norris Sanders. It is a useful exercise to develop a degree of skill in recognizing the various types. Hunter urges teachers and supervisors to develop fluency in working through Bloom's taxonomic levels (this helps to pinpoint the cognitive levels):

Knowledge	(Memory level) Can they tell you the facts? "Where did Miss Muffet sit? Who sat beside her?"
Comprehension	Get them to tell you in their own words or to translate it. "Tell me in your own words why Miss Muffet decided to leave?"

Most classroom questions (including those found in workbooks) stop at the knowledge and comprehension level. Thus the lesson concludes without using these "bricks" to build something. Hunter urges teachers to stretch the student's mind by requiring him to re-assemble and reintegrate the basic facts and apply them to new situations.

Application	Apply to a new situation. They may never have had this question posed to them before. Requires pupil to solve a lifelike problem. "If Miss Muffet had gone swimming what might have frightened her?"
Analysis	Problem solving that makes you think in categories. You have to tear something apart analytically to understand the relationship between the parts better. Does the new information fit here? "What did Miss Muffet do that indicated she was nervous of the spider? What are the chances that Miss Muffet likes yogurt? or chocolate-covered ants?"
Synthesis	Creativity and invention. You have to have information you can apply. Edison had a thorough knowledge, understanding, application, and analysis level of understanding before he was able to invent the light bulb. Hunter describes it as "inspiration on top of knowledge." "If Miss Muffet were to go to the moon, how might the poem be written instead?"

Evaluation	Asks student to make a judgment of good/bad, right/wrong, moral/immoral according to certain standards. It involves the weighing of two or more values. "From a poetic standpoint, is this a good poem?" "Is the Miss Muffet story one of the most exciting? Explain why." "Who is less brave, Miss Muffet or the first of the three little pigs?"

Given the pace of question-and-answer sessions, it is obvious that you would have to be able to classify the questions quickly and accurately or you would miss coding a great deal of interaction data. You need to consult a more detailed resource in order to clarify the categories and to become proficient in using and recognizing question types and there are plenty of such resources available. After detailed study and practice of these more discrete question categories, you will feel very comfortable in differentiating between "higher order" and "lower order" questions as you record verbal data during instruction. You may wish to revert back to using the "Product" and "Process" question categories but with a more accurate understanding of the differentiation.

Appropriate Mix

To return to the decision of whether the mix of questions is appropriate, you would have to watch the students to detect signs of confusion or listen to the answers they provide. Knowing background information about the students and about the previous work the teacher has done with them assists you, as does a knowledge of the subject matter the teacher is presenting. In some lessons it might be entirely appropriate to use only factual questions.

Video - High and Low Order Questions

A description of the teacher behaviors involved in using a mix of higher and lower order questions is presented (VHS 0561). Six examples follow (VHS 0592 - 0837).

3/4" 482
VHS 0592
Yours ______

Illustration A - Grade 5/6, Language Arts

Jims asks, "What are the 3 main elements in a mystery story?" Students provide the terms "climax" and "suspense" and are asked to define them. "What kind of character does a mystery story have to have?"

3/4" 505
VHS 0623
Yours ____

Illustration B - Grade 1, Language Arts

Helen has handed out a picture that illustrates the story "Time to Make the Bed." "From seeing the title, what do you wonder is going to happen in the story? . . . Why isn't the bed made? . . . Is the boy going to make the bed?" Together, the students and teacher formulate questions and Helen prints them on the chalkboard.

3/4" 530
VHS 0656
Yours ____

Illustration C - Grade 11, Biology

Peter has asked for several reasons aquatic organisms might be affected by their environment. As students provide a list of answers, he writes them on the chalkboard.

3/4" 560
VHS 0695
Yours ____

Illustration D - Grade 8, Art

After showing several prints of the "old masters", Ron shows the class drawings done by their peers. He asks the class which style (Van Gogh, Monet, Lezanne) the drawing is most like.

3/4" 576
VHS 0718
Yours ____

Illustration E - Grade 1, Language Arts

After students have read today's story to themselves, Faye calls them to "centre" and quizzes them about the details of the story. "What was Vicki's problem? . . . Who was the bigger person in the family?. . . What did she do when she saw Vicki playing her drums?. . . Do we know other ways to solve our problems?"

3/4" 613
VHS 0767
Yours ____

Illustration F - Grade 10, French

Denise directs questions to her students and they must respond in French. They practice changing the verb tense. "Today I eat, yesterday I ate. Today I dance, yesterday I danced."

Instrumentation

Teacher uses effective questioning techniques

1	2	3	4	5	Not Observed
Low		Med		High	

Notes

Indicators

- draws responses from a large number of students
- keeps students actively involved
- uses facts students know in asking higher level questions
- responds to the efforts of the learner
- provides wait time
- holds students accountable for an answer
- indicates the appropriate way to answer (write it down, hands up)

(Adapted from MacCannell and Young, 1980)

Questioning Techniques

USE: When teacher is asking class or group questions
PURPOSE: To see if teacher is following principles for good questioning practices
For each question, code the following categories:

BEHAVIOR CATEGORIES

A. TYPE OF QUESTION ASKED
  1. Academic: Factual. Seeks specific correct response
  2. Academic: Opinion. Seeks opinion on a complex issue where there is no clear-cut response
  3. Nonacademic: Question deals with personal, procedural, or disciplinary matters rather than curriculum

B. TYPE OF RESPONSE REQUIRED
  1. Thought question. Student must reason through to a conclusion or explain something at length
  2. Fact question. Student must provide fact(s) from memory
  3. Choice question. Requires only a yes-no or either-or response

C. SELECTION OF RESPONDENT
  1. Names child before asking question
  2. Calls on volunteer (after asking question)
  3. Calls on nonvolunteer (after asking question)

D. PAUSE (AFTER ASKING QUESTION
  1. Paused a few seconds before calling on student
  2. Failed to pause before calling on student
  3. Not applicable; teacher named student before asking question

E. TONE AND MANNER IN PRESENTING QUESTION
  1. Question presented as challenge or stimulation
  2. Question presented matter-of-factly
  3. Question presented as threat or test

	CODES				
	A	B	C	D	E
1.	1	2	2	1	2
2.	1	2	2	1	2
3.	1	3	2	1	2
4.	1	2	2	1	2
5.	1	2	2	1	2
6.	1	3	2	1	2
7.	1	2	2	1	2
8.	2	1	2	1	1
9.	1	2	2	1	2
10.	1	2	2	1	2
11.	1	2	2	1	2
12.	1	2	2	1	2
13.					
14.					
15.					
16.					
17.					
18.					
19.					
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21.					
22.					
23.					
24.					
25.					
26.					
27.					

RECORD ANY INFORMATION RELEVANT TO THE FOLLOWING:

Multiple Questions: Tally the number of time the teacher:
1. Repeats or rephases question before calling on anyone 11
2. Asks two or more questions at the same time 0

Sequence. Were questions integrated into an orderly sequence, or did they seem to be random or unrelated?

(Teacher seemed to be following sequence given in manual) (led up to next history unit).

Did students themselves pose questions? No

Was there student-student interaction? How Much? None

When appropriate, did the teacher redirect questions to several students, or ask students to evaluate their own or other's responses? No

Looking in Classrooms-Second Edition. Thomas L. Good and Jere E Brophy, New York: Harper and Row, Publishers. 1978. page 377

CHAPTER FOUR - MODULE FOUR

USE OF PRAISE

(Praise and Encouragement/Criticism, Individualization of Instruction)

> **"Teachers should use praise to reward outstanding work as well as to encourage students who are not always able to do outstanding work."**

An Extrinsic Motivator

Students should be supported and encouraged to do their best work. They require academic feedback about their progress and guidance in their acquisition of new learning. The use of praise also contributes to a positive climate in the classroom where the teacher is supportive of student effort, which in turn leads to greater student success. Good and Brophy reviewed the literature on praise and concluded that too much emphasis has been placed on the quantity and frequency of reinforcement and not enough attention has been devoted "to quality issues and questions such as whom to reinforce, under what conditions, and with what kind of reinforcement." (1984: 190). Praise becomes rather meaningless with over use.

Students find intrinsic satisfaction in doing some activities and this should be fostered instead of making them partially dependent on extrinsic rewards (of which teacher praise might be one example). In fact, certain students may not find teacher praise particularly rewarding and subsequently may lose interest in doing the activity.

Individuals react to praise in various ways depending on factors such as the source of praise, the way it was provided and its appropriateness. Praise coming from someone who is skilled and competent is meaningful and appreciated. It is doubtful that a gifted and accomplished dancer would attach much value to praise given by an appreciative admirer, although it is complimentary. An overly effusive burst of praise is almost suspect and the student may doubt the sincerity of the message. Public praise, although well earned, may embarrass the student more than delight him. A teacher searching for ways to develop a workable relationship with a student may resort to overpraising a behavior that would normally go almost unnoticed in any other student, or praising work that is average at best. Negative reactions by students can be caused by inappropriate praise of the "consolation prize" variety.

Guidelines for Using Praise

Good and Brophy (1984: 183) compiled a set of guidelines for praising appropriately:

1. Praise should be simple and direct. It should be delivered in a natural voice, without gushing or overdramatizing. Even very young students will see theatrics as insincere.

2. Praise is usually more effective if it is given in straightforward declarative sentences: "That's very good, I never thought of that before," instead of gushy exclamations: "Wow!" or rhetorical questions. "Isn't that wonderful!" The latter are condescending and more likely to embarrass than reward.

3. The particular behavior or accomplishment being praised should be specified. Any noteworthy effort, care, or perseverence should be recognized: "Good! You figured it out all by yourself. I like the way you stuck with it without giving up," instead of "Yes! That's right." Call attention to new skills, both to praise the student and to reinforce the value of the skill: "I notice you've learned to use different kinds of sentences in your compositions. They're more interesting to read now. Keep up the good work."

4. Teachers should use a variety of phrases when praising students. Stock phrases that are over-used soon become meaningless. They begin to sound insincere and give the impression that the teacher has not really paid much attention to the students.

5. Verbal praise should be backed with nonverbal communication of approval. "That's good" is not very rewarding when said with a deadpan expression, a flat tone of voice, and an air of distraction or apathy. The same phrase is much more effective when delivered with a smile, a tone communicating appreciation or warmth, or gestures such as a pat on the back. Statements like, "You were really good today" are ambiguous. Students may take them as praise for compliance rather than for learning. Instead, teachers should praise in a way that specifically rewards learning effort: "I'm very pleased with the way you read this morning, especially the way you pronounced the initial consonants, and you read with so much expression. You made the conversation between Karen and Mr. Taylor sound very real. Keep up the good work."

6. Ordinarily, individual students should be praised privately. Public praise in front of the group or the whole class will embarrass some students and even cause problems with the peer group, so that it will function more as punishment than as a reward. It is difficult to praise students publicly without sounding like you are holding them up as examples to the rest of the class. Delivering praise during private interactions avoids this problem and also helps show the student that the praise is genuine and not a gimmick used in an attempt to motivate other students.

7. It is a good idea to show appreciation for students' accomplishments and help in a public way, but without carrying through to the extent of praising them. Facial expressions and verbal comments that communicate genuine admiration for a student accomplishment or genuine appreciation for help given by a student are likely to be experienced as rewarding and also to reinforce desirable behavior through modelling. Such reactions of admiration or appreciation have more credibility than public praise, which often is perceived, with good reason, as an attempt by the teacher to manipulate the class.

When used systematically and appropriately, teacher attention and praise can reinforce behavior in students. It helps students to know that their efforts and progress are seen and appreciated, especially if delivered in natural, genuine language that includes a description of the specific behavior being praised.

Video - Use of Praise

A general description of both praise and criticism is presented (VHS 0837). Five examples of praise (VHS 0855 - 0960) and three examples of mild criticism are presented.

3/4" 680
VHS 0855
Yours _____

Illustration A - Grade 8, Art

Ron circulates to give feedback to students who are drawing a flower. "I like it. Oh, gorgeous! It's so abstract - so like you . . . Keep going, don't stop. Beautiful folds you've got . . . I am so pleased with that one, especially here."

3/4" 690
VHS 0871
Yours _____

Illustration B - Grade 1, Language Arts

Faye assists students who are writing a story. A student needs to spell a word. Another student helps her while the teacher listens. "Excellent! Congratulations!" She shakes his hand. "A 'huge-y' for a grade one to spell. Way to go, Ben!"

3/4" 704
VHS 0891
Yours _____

Illustration C - Grade 12, Math

Marilyn demonstrates how to solve a math question on the chalkboard. "How do I find what's between them? Exactly! Good! Why? Because you're taking _____ and you'll get _____." (Student question). "Hang on, then we'll take a look. Okay, Leon you wanted to ask _____. Exactly! Exactly!"

3/4" 718
VHS 0909
Yours _____

Illustration D - Grade 2/3, Language Arts

Heather listens while a student spells words. "l-o-n-g-e-r" - "Good - Great, Terry! She's got one whole side of her spelling bone clean. She was having trouble at the beginning but she's really working hard to get it off - probably one of the hardest working ones." Teacher helps Charlie with his work. "Good - you can spell that Charlie - you've got it."

3/4" 730
VHS 0925
Yours ______

Illustration E - Grade 7, Art

Merv circulates to check on the calligraphy his students are doing. "That's nice. I don't think I can do it any better. . . Looks good. You have to go a bit higher but it looks good. It's the best I've seen you do for a long time."

3/4" 739
VHS 0937
Yours ______

Illustration F - Grade 1, Language Arts

Faye monitors her students as they finish up assigned work. "Well, write about it then." To another: "Adam, is that all we've done today? My speedy writer? Tell me about what happened when you made a racket."

3/4" 744
VHS 0945
Yours ______

Illustration G - Grade 8, Art

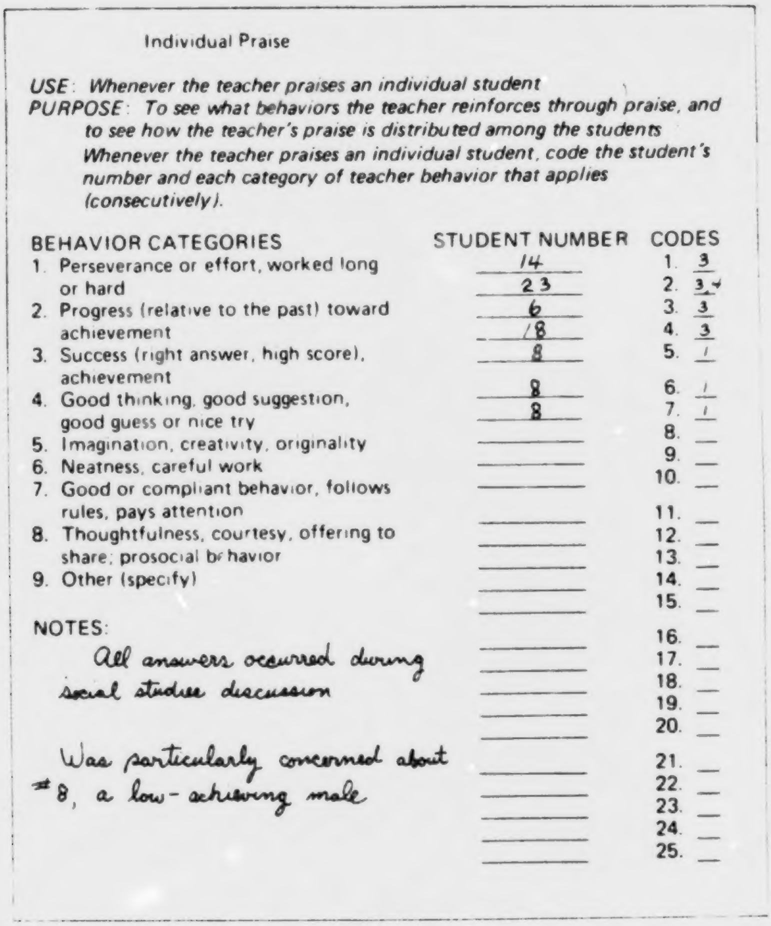
Ron discusses the drawings his students did outside yesterday. "In class outside, I only got a couple I was pleased with."

3/4" 748
VHS 0949
Yours ______

Illustration H - Grade 12, Math

Marilyn monitors seat work in math. "Take a good look at that right now. Any problems, let me know." To another: "Andrew - Well, fix it now. You have to learn how to do it. You're a good half hour behind."

VHS 0960 - Credits



Individual Praise

USE: Whenever the teacher praises an individual student
PURPOSE: To see what behaviors the teacher reinforces through praise, and to see how the teacher's praise is distributed among the students
Whenever the teacher praises an individual student, code the student's number and each category of teacher behavior that applies (consecutively).

BEHAVIOR CATEGORIES
1. Perseverance or effort, worked long or hard
2. Progress (relative to the past) toward achievement
3. Success (right answer, high score), achievement
4. Good thinking, good suggestion, good guess or nice try
5. Imagination, creativity, originality
6. Neatness, careful work
7. Good or compliant behavior, follows rules, pays attention
8. Thoughtfulness, courtesy, offering to share; prosocial behavior
9. Other (specify)

STUDENT NUMBER	CODES
14	1. 3
23	2. 3, 4
6	3. 3
18	4. 3
8	5. 1
8	6. 1
8	7. 1
	8.
	9.
	10.
	11.
	12.
	13.
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	21.
	22.
	23.
	24.
	25.

NOTES:

All answers occurred during social studies discussion

Was particularly concerned about #8, a low-achieving male

Looking in Classrooms - Second Edition. Thomas L. Good and Jere E. Brophy, New York: Harper & Row, Publishers. 1978. page 111

CHAPTER FOUR - MODULE FIVE

USE OF CRITICISM

(Praise and Encouragement/Criticism, Individualization of Instruction)

> **"Teachers should use mild criticism, on occasion, in order to communicate expectations to more able pupils."**

Criticism

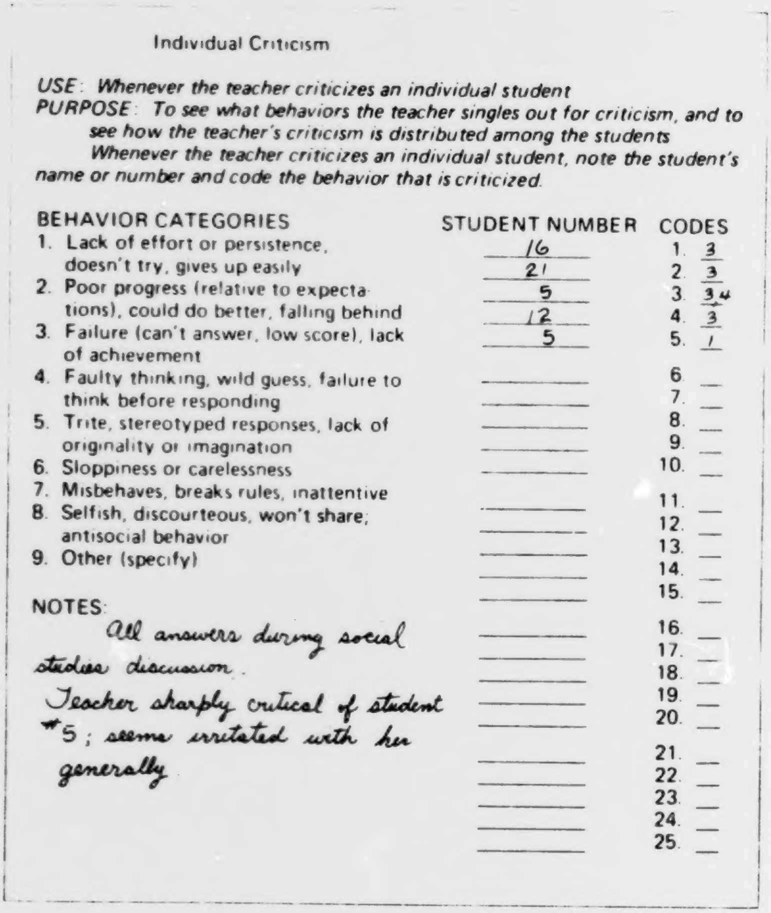
As a general rule, teachers should avoid using criticism as feedback for either student behavior or academic work. The climate one works so hard to develop, usually suffers a great deal when critical sentiments are voiced. Obviously, feedback is needed but confining it to a "knowledge of results" (exactly what was incorrect, and why) accompanied by suggestions for redressing the situation is a better plan.

Teacher behaviors are frequently tied in with their expectations for student achievement. Good and Brophy cite research indicating that teachers tend to give less praise to low achievers when they answer correctly. They probably need this support the most. Conversely, low achievers are more likely to receive criticism for a wrong answer. This assuredly affects their risk-taking behavior and their willingness to volunteer. If a wrong answer will be publicly criticized, it is far safer for the student to remain silent, when uncertain, than to take such a chance.

In like fashion, teachers are more prone to criticise misbehavior than they are inclined to praise desirable behavior. It seems to be more difficult to "catch them being good" when teachers are trying to reinforce acceptable student behavior and re-establish a more pleasant classroom climate. (Incidentally, the same tendency can occur with classroom observers who appear to concentrate on fault finding, thereby missing many noteworthy teacher behaviors. Teachers don't appreciate hearing this any more than students do, by the way.)

Strictly speaking, criticism serves no useful purpose as feedback for academic work except, perhaps, on the rare occasions when a student, known to be capable of excellent work, needs a proverbial kick. The teacher knows the personality of this student well enough to judge the effect of the reproof and counts on the pride and confidence of the student to help him dc a better job in future. Thus the use of criticism would be very "situational."

As there are many positive ways to interact with students when working for the improvement of either behavior or schoolwork, criticism should be used very sparingly, if at all.



Individual Criticism

USE: Whenever the teacher criticizes an individual student
PURPOSE: To see what behaviors the teacher singles out for criticism, and to see how the teacher's criticism is distributed among the students
Whenever the teacher criticizes an individual student, note the student's name or number and code the behavior that is criticized.

BEHAVIOR CATEGORIES
1. Lack of effort or persistence, doesn't try, gives up easily
2. Poor progress (relative to expectations), could do better, falling behind
3. Failure (can't answer, low score), lack of achievement
4. Faulty thinking, wild guess, failure to think before responding
5. Trite, stereotyped responses, lack of originality or imagination
6. Sloppiness or carelessness
7. Misbehaves, breaks rules, inattentive
8. Selfish, discourteous, won't share; antisocial behavior
9. Other (specify)

STUDENT NUMBER	CODES
16	1. 3
21	2. 3
5	3. 3 4
12	4. 3
5	5. 1
	6.
	7.
	8.
	9.
	10.
	11.
	12.
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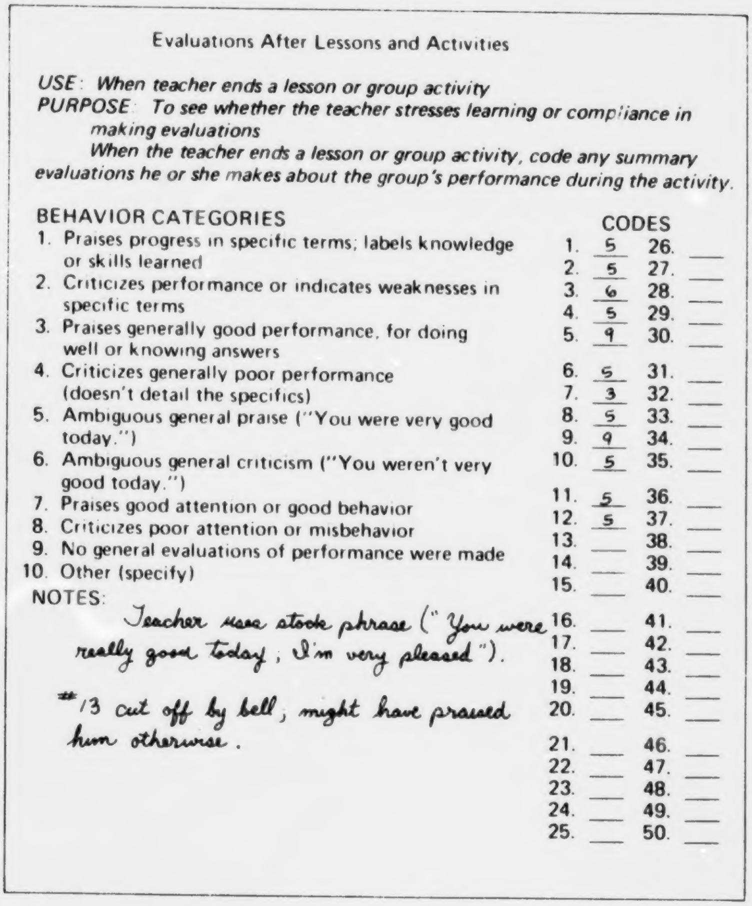
	24.
	25.

NOTES:

All answers during social studies discussion.

Teacher sharply critical of student #5; seems irritated with her generally

Looking in Classrooms - Second Edition. Thomas L. Good and Jere E. Brophy, New York: Harper & Row, Publishers. 1978. page 112



Evaluations After Lessons and Activities

USE: When teacher ends a lesson or group activity
PURPOSE: To see whether the teacher stresses learning or compliance in making evaluations

When the teacher ends a lesson or group activity, code any summary evaluations he or she makes about the group's performance during the activity.

BEHAVIOR CATEGORIES

1. Praises progress in specific terms; labels knowledge or skills learned
2. Criticizes performance or indicates weaknesses in specific terms
3. Praises generally good performance, for doing well or knowing answers
4. Criticizes generally poor performance (doesn't detail the specifics)
5. Ambiguous general praise ("You were very good today.")
6. Ambiguous general criticism ("You weren't very good today.")
7. Praises good attention or good behavior
8. Criticizes poor attention or misbehavior
9. No general evaluations of performance were made
10. Other (specify)

NOTES:

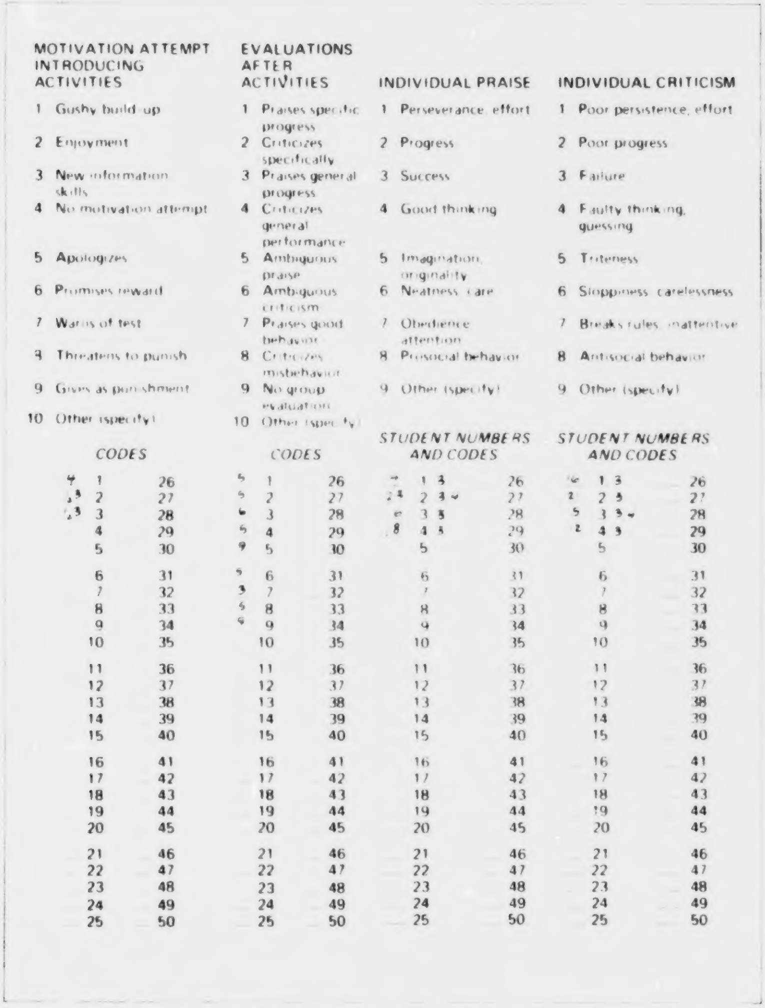
Teacher uses stock phrase ("You were really good today; I'm very pleased").

#13 cut off by bell, might have praised him otherwise.

CODES

1.	5	26.	
2.	5	27.	
3.	6	28.	
4.	5	29.	
5.	9	30.	
6.	5	31.	
7.	3	32.	
8.	5	33.	
9.	9	34.	
10.	5	35.	
11.	5	36.	
12.	5	37.	
13.		38.	
14.		39.	
15.		40.	
16.		41.	
17.		42.	
18.		43.	
19.		44.	
20.		45.	
21.		46.	
22.		47.	
23.		48.	
24.		49.	
25.		50.	

Looking in Classrooms - Second Edition. Thomas L. Good and Jere E. Brophy, New York: Harper & Row, Publishers. 1978. page 110

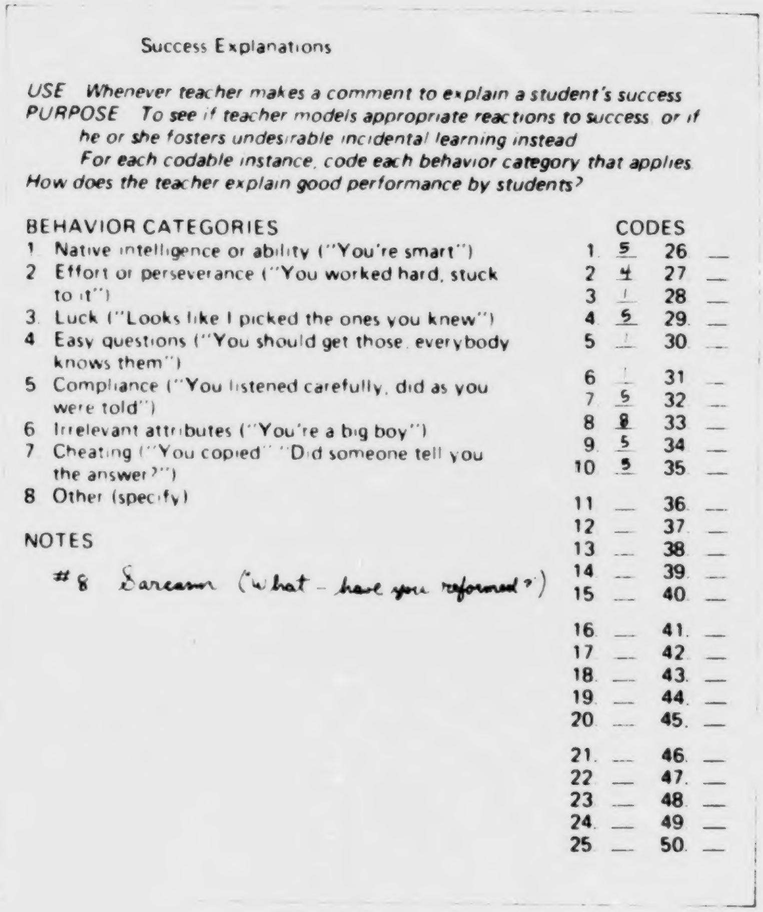


MOTIVATION ATTEMPT INTRODUCING ACTIVITIES	EVALUATIONS AFTER ACTIVITIES	INDIVIDUAL PRAISE	INDIVIDUAL CRITICISM
1 Gushy build-up	1 Praises specific progress	1 Perseverance, effort	1 Poor persistence, effort
2 Enjoyment	2 Criticizes specifically	2 Progress	2 Poor progress
3 New information skills	3 Praises general progress	3 Success	3 Failure
4 No motivation attempt	4 Criticizes general performance	4 Good thinking	4 Faulty thinking, guessing
5 Apologizes	5 Ambiguous praise	5 Imagination, originality	5 Triteness
6 Promises reward	6 Ambiguous criticism	6 Neatness, care	6 Sloppiness, carelessness
7 Warns of test	7 Praises good behavior	7 Obedience, attention	7 Breaks rules, inattentive
8 Threatens to punish	8 Criticizes misbehavior	8 Prosocial behavior	8 Antisocial behavior
9 Gives as punishment	9 No group evaluation	9 Other (specify)	9 Other (specify)
10 Other (specify)	10 Other (specify)		

CODES			CODES			STUDENT NUMBERS AND CODES			STUDENT NUMBERS AND CODES		
4	1	26	5	1	26	7	1 3	26	6	1 3	26
2,3	2	27	5	2	27	2 4	2 3 ✓	27	2	2 3	27
2,3	3	28	6	3	28	6	3 3	28	5	3 3 ✓	28
	4	29	5	4	29	8	4 3	29	2	4 3	29
	5	30	9	5	30		5	30		5	30
	6	31	5	6	31		6	31		6	31
	7	32	3	7	32		7	32		7	32
	8	33	5	8	33		8	33		8	33
	9	34	6	9	34		9	34		9	34
	10	35		10	35		10	35		10	35
	11	36		11	36		11	36		11	36
	12	37		12	37		12	37		12	37
	13	38		13	38		13	38		13	38
	14	39		14	39		14	39		14	39
	15	40		15	40		15	40		15	40
	16	41		16	41		16	41		16	41
	17	42		17	42		17	42		17	42
	18	43		18	43		18	43		18	43
	19	44		19	44		19	44		19	44
	20	45		20	45		20	45		20	45
	21	46		21	46		21	46		21	46
	22	47		22	47		22	47		22	47
	23	48		23	48		23	48		23	48
	24	49		24	49		24	49		24	49
	25	50		25	50		25	50		25	50

Sample Coding Sheet Combining Four Observation Forms

Looking in Classrooms - Second Edition. Thomas L. Good and Jere E. Brophy, New York: Harper & Row, Publishers. 1978. page 106



Success Explanations

USE Whenever teacher makes a comment to explain a student's success
PURPOSE To see if teacher models appropriate reactions to success, or if he or she fosters undesirable incidental learning instead
For each codable instance, code each behavior category that applies
How does the teacher explain good performance by students?

BEHAVIOR CATEGORIES

1 Native intelligence or ability ("You're smart")
2 Effort or perseverance ("You worked hard, stuck to it")
3 Luck ("Looks like I picked the ones you knew")
4 Easy questions ("You should get those, everybody knows them")
5 Compliance ("You listened carefully, did as you were told")
6 Irrelevant attributes ("You're a big boy")
7 Cheating ("You copied" "Did someone tell you the answer?")
8 Other (specify)

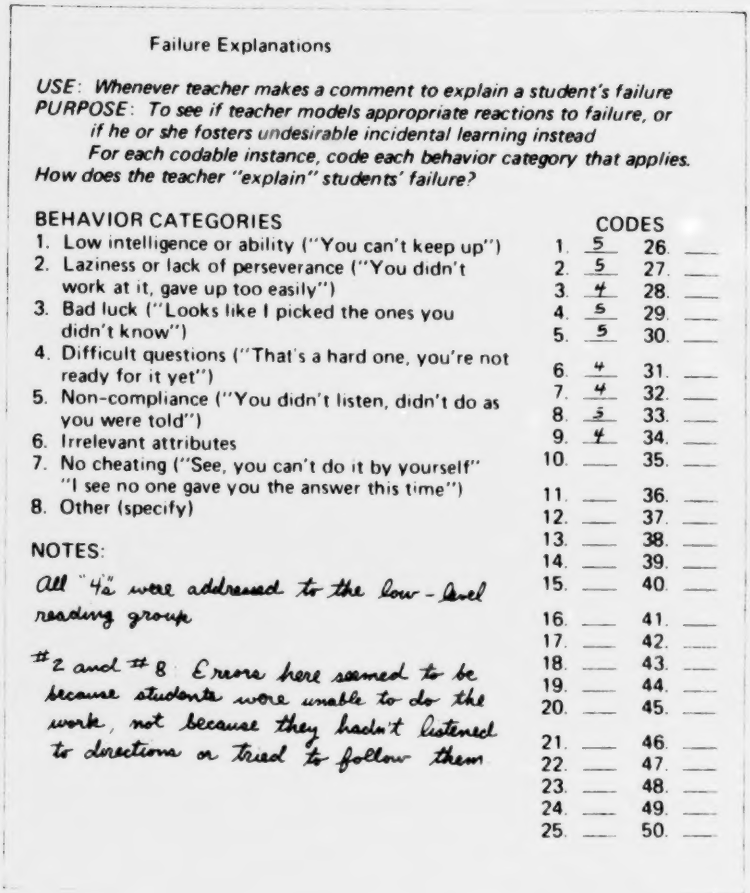
NOTES

#8 Sarcasm ("What - have you reformed?")

CODES

1.	5	26.	___
2	4	27	___
3	1	28	___
4.	5	29.	___
5	1	30.	___
6	1	31	___
7.	5	32	___
8	8	33	___
9.	5	34	___
10	5	35.	___
11	___	36.	___
12	___	37.	___
13	___	38.	___
14	___	39.	___
15	___	40.	___
16.	___	41.	___
17	___	42	___
18.	___	43.	___
19.	___	44.	___
20	___	45.	___
21.	___	46.	___
22	___	47.	___
23	___	48.	___
24.	___	49	___
25	___	50.	___

Looking in Classrooms - Second Edition. Thomas L. Good and Jere E. Brophy, New York: Harper & Row, Publishers. 1978. page 157



Failure Explanations

USE: Whenever teacher makes a comment to explain a student's failure
PURPOSE: To see if teacher models appropriate reactions to failure, or
if he or she fosters undesirable incidental learning instead
For each codable instance, code each behavior category that applies.
How does the teacher "explain" students' failure?

BEHAVIOR CATEGORIES

1. Low intelligence or ability ("You can't keep up")
2. Laziness or lack of perseverance ("You didn't work at it, gave up too easily")
3. Bad luck ("Looks like I picked the ones you didn't know")
4. Difficult questions ("That's a hard one, you're not ready for it yet")
5. Non-compliance ("You didn't listen, didn't do as you were told")
6. Irrelevant attributes
7. No cheating ("See, you can't do it by yourself" "I see no one gave you the answer this time")
8. Other (specify)

NOTES:

All "4's" were addressed to the low-level reading group

#2 and #8 Errors here seemed to be because students were unable to do the work, not because they hadn't listened to directions or tried to follow them

CODES

1. 5
2. 5
3. 4
4. 5
5. 5
6. 4
7. 4
8. 5
9. 4
10. ___
11. ___
12. ___
13. ___
14. ___
15. ___
16. ___
17. ___
18. ___
19. ___
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36. ___
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39. ___
40. ___
41. ___
42. ___
43. ___
44. ___
45. ___
46. ___
47. ___
48. ___
49. ___
50. ___

Looking in Classrooms - Second Edition. Thomas L. Good and Jere E. Brophy, New York: Harper & Row, Publishers. 1978. page 158

CHAPTER FOUR

STEP-BY-STEP MANUAL FOR CODING DYADIC VERBAL INTERACTIONS IN THE CLASSROOM

Used with kind permission from Dr. Gene Hall -
Research and Development Center, Austin, Texas;
Dr. Jere Brophy; and Dr. Tom Good

STEP-BY-STEP MANUAL FOR CODING DYADIC VERBAL INTERACTIONS IN THE CLASSROOM.

The writer has made a heavy use of the work of Good and Brophy (1969) in assembling instructions for using this sytem of coding and wishes to acknowledge them again at this time.

For those of you who become fascinated (as I did) with the wealth of information conveyed by reciprocal verbal interactions, this series of exercises will enhance your ability to gather verbal data.

It is most worthwhile to bear with me and read through the following sections. Please try to code using segments of the coding system as they are presented. Don't give up. By walking in these shoes for a while you will develop better auditory acuity and speed in coding. There are plenty of practice tapes in the tape bank (Chapter Six) and you can practise coding verbal data from this footage or in live coding situations. Give it a good try. It is, assuredly, a sophisticated way of gathering information. If you wish, you can revert back to a much simpler instrument later and be even more proficient because you have been alerted to many additional categories and subtleties in verbal exchanges.

Features of the Instrument

Data are collected by using a check mark to note the occurrence of a behavior. The categories included are discrete, and with the explanations provided (and priority rules of how to code when in doubt) a coder should be able to place tally marks in the appropriate box once speed and accuracy are practised. (The writer has used the instrument in research studies and attests to its versatility and the wealth of information it can provide.) Because a coding decision can be made readily (and does not require inference-making), the instrument is considered to be a "low-inference" data collection instrument.

The term "dyadic" indicates that each interaction takes place between the teacher and one student. This interaction can occur in a public setting but can be meant for and monitored by the entire class or by the entire group at the moment (e.g., a reading group). The interaction could occur in a private setting as well and, if so, the appropriate context should be coded. The main purpose of this instrument is to record those public attempts by an individual child to respond to a question posed by the teacher. (Those interactions that occur between the teacher and the whole class in unison -choral answer - are not coded on this instrument.)

Many observation instruments treat the whole class as a unit and thus ignore intra-class differences. Teacher (verbal) interactions are usually directed to individual students and not to the class as a whole, although they may occur in the public domain. For example, the teacher may demonstrate examples of "warmth" or "asking higher level questions" to some students in the class during whole-class instruction and thereby may receive a high rating on this teacher behavior variable. However, not all students experience teacher warmth or challenging questions. By considering the individual student as the basic unit of analysis, differences in the treatment of specific students may be examined. The actual quality (what the teacher does or says when interacting with the student) and the quantity (sheer frequency of contact) of interactions will vary for certain students or certain sub-groups of students. (Teachers tailor their interactions with individual students on the basis of the expectations held for student performance, either consciously or unconsciously.) The format of the dyadic verbal interaction coding instrument, as developed initially by Brophy and Good, 1969, enabled such differentiations in treatment of students to be identified.

The component parts of this dyadic verbal interaction instrument are explained in Looking in Classrooms by Good and Brophy. It is very worthwhile to begin with the initial coding exercises outlined in their book. (Some of the exercise sheets have been included in this manual). For their own research work, Good and Brophy combined an extensive number of verbal interaction elements on a two-page (8½ by 14 inch) coding instrument that was extremely complex but it yielded information about all aspects of verbal interaction. A simplified version of their instrument, adapted by the writer for her own research study, is included in the appendix for interest's sake. Also included is the adaptation used by Dr. Al. MacKay in Project Quest, 1979 (a research study in 60 Edmonton Public Schools classrooms conducted by the Centre for Research in Teaching, University of Alberta, page 1-9).

Once a few versions of these instruments are examined and understood, the reader will realize that the coding form can be as simple or as complex as the purpose warrants. The commonalities among various instruments will become apparent. You will gradually work through a rather basic adaptation of the coding instrument in Chapter Four. This practical exercise follows descriptions of recommended teacher verbal behaviours.

A hint to keep in mind, if you ever become very sophisticated and decide to use the instrument in your repertoire in a large-scale, observational research study: make the grid the identical size of computer grid paper so a key punch operator can easily transfer your data to computer cards for more expedient analysis of your data.

The instrument may be used without identifying the particular student (which involves memorizing an identification number and inserting it when the interaction is coded) and a great deal of verbal interaction information can be collected. However, it is important to point out the ultimate potential for its use (as you become more proficient in coding these interactions). A composite picture of all interactions (types and amounts) for a particular child can be generated by computer following a series of data collections. The resulting "profile" for that student can be examined in relation to other factors. Data can be aggregated for several students who belong to a sub-group in the classroom to determine the patterns of interaction they experience with the teacher. Of course, all the data can be combined and the whole class can be treated as the unit of analysis. Thus, the method of coding provides you with the flexibility of examining the interactions in many ways by identifying the child involved in each interaction - certainly an option you may wish to use.

Another distinctive feature of this coding system is the preservation of the sequential nature of teacher-child interaction. As in a tennis match, the interaction is mutually interdependent. Typically, an interaction might involve a question, the selection of the student, the student response, and the teacher reaction to the student response followed by the next interaction. The initiator (teacher or student) of the interaction is coded as well as the particular sequence of events. One continuous contact with a child may involve several rallies back and forth (e.g., teacher prolongs the contact with additional questions). The sequence of these interactions and their actual type can be collected on this instrument. In retrospect, a record of the ebb and flow of these interactions can be reconstructed and patterns of teacher verbal behaviour will emerge. For example, questions such as "What are the predominant teacher verbal behaviors following a wrong answer?" can be answered.

Initially the parts of the instrument will be considered in segments with an explanation for each category within the segment. Try to get coding practice on each individual segment so you will not be overwhelmed when you try to code several segments together. This can prove to be very discouraging as the rapid pace of classroom dialogue poses a challenge of its own. It is important to keep in mind that your own purpose will determine the categories you choose to include in the data collection instrument you adopt in your own district. In the meantime, bear with me and try using the categories suggested for practice purposes. This will increase your proficiency and flexibility in coding.

Since it is as good a place to start as any, let us begin by looking at the segment called "Quality of Student Answer".

QUALITY OF STUDENT ANSWER

The accuracy of student answers can be informative in its own right. If 95% of all answers are correct, could the students be underchallenged? If 95% are incorrect, is the teacher presenting material that is too difficult for the students? One can expect students to provide partially correct as well as wrong answers and these instances are instructional opportunities for teachers to diagnose why the student is having difficulty or to rephrase the question. The coding categories included under the segment called "Quality of Student Answer" are as follows:

Correct

It is the teacher's perception of the correctness of the child's response that is coded, not the coder's perception. The next variable to be coded is the teacher's feedback to this response. Consequently, if the teacher reacts to the answer as if it is "wrong," it is coded "wrong" (even though the observer may feel it is partially correct or even exactly right). Thus, if the answer appears to satisfy the teacher, it is coded as "correct."

In fact, the teacher may not give positive affirmation or make a favorable response to it but unless the teacher expresses dissatisfaction with it or makes an attempt to improve upon the answer, it is to be construed as "correct".

Partially Correct

This answer is incomplete but (a part of) it contains correct information. The teacher will grant credit to a part of the answer. Although it may not be the answer the teacher was looking for, the teacher may indicate the answer is somewhat defensible and has merit. Perhaps the teacher has not said the answer is "wrong" but has hesitated or has accepted part of it and qualified the response to make it even more acceptable.

Wrong Answer

In this case, the student answer is simply treated as wrong by the teacher. (Again, it is the teacher's perception of the answer that governs how it is coded.) The teacher reaction to the response may involve saying "no," giving the answer, or asking another student to provide it - but in some way the teacher has indicated the student response is incorrect.

Don't Know

The preceding types of answers (correct, partly correct, wrong) represent occasions where the child provides a substantive response to the teacher's question. The "Don't Know" response category is used for those times when the student indicates verbally or non-verbally that (s)he does not know what to say in response to the question.

No Response

All cases in which the student fails to make a substantive response or indicates an inability to do so are coded as "No Response." (*The "Don't Know" category can be subsumed under this category if you wish to reduce the number of coding categories or if this distinction is not important for your coding purposes.) After waiting a period of time for an answer, the teacher moves on to another student or provides the correct answer.

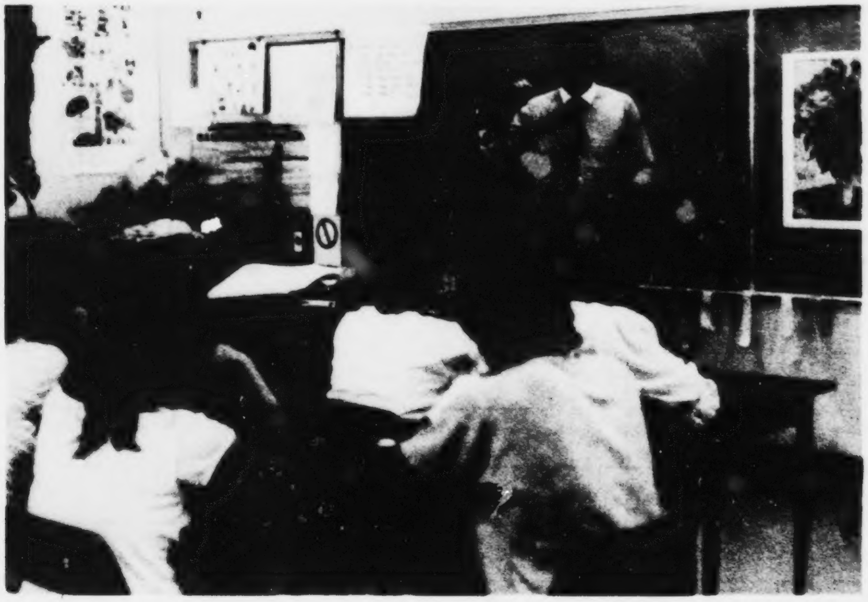
If the teacher is waiting for a response from a particular student (Sue) and this response opportunity is usurped by another student (Joe) then the initial interaction has ended with a "No Response"; presuming the teacher accepts the called-out answer (instead of ignoring it and waiting for the designated student, Sue, to answer). If the called-out answer is accepted by the teacher then the coder drops down to the next coding line to record the teacher's feedback to the second student (Joe). Retroactively, the same question would be coded (for Joe) and, since it was hanging in the air and he answered it, the selection mode would reflect Joe's seizing this opportunity to answer without being asked by the teacher to do so.

An ambiguous situation can result when the chosen student has mumbled something the coder has not heard. If the teacher reacts to this response as a substantive answer, then the coder must decide, by the teacher's reaction, which of the three categories (correct, partly correct, wrong) the teacher has judged it to be. If the teacher has not clearly heard/understood the response or has not reacted to its accuracy in any way, then code the answer as a "No Response."

At this point, before more segments and coding demands are placed upon you, practise coding during a fast-paced class discussion where many questions and answers are occurring.

Use the following format to record the quality of Student Answers, and remember to watch for the non-verbal teacher behaviors (nodding/shaking the head) that govern whether the answer is correct or incorrect. You may wish to secure permission to audio tape the lesson so you can go back and check the exact teacher verbal reaction.

If a fellow coder is available, go together and compare your results afterwards. Viewing a videotape affords good practice, too. Choose a segment from one of the eleven video tapes in Chapter Six. The degree to which you obtain the identical results is an indication of the reliability you possess as coders. The next segment we will explore and use is the one to which you have already been attending, in part, in order to make your decisions concerning the quality of answers - that is, Teacher Response to Student Answer. However, before you read on, use the coding form for Quality of Answer to collect some data on student answers.



FORM 4-1

Coding Form For Quality Of Student Answer

QUALITY OF STUDENT ANSWER					
WHO	**CORRECT**	**PARTLY CORRECT**	**WRONG**	**DON'T KNOW**	**NO RESPONSE**

You will note the "gentle persuasion" to be thinking about the identity of the individual student. If you are coding in a small group setting you may want to try and insert a number or letter as you code. No pressure! It's just something to keep in mind and something to work toward as you develop your skill in using this particular instrument. The important focus is on the response itself and how correct the teacher perceives it to be.

TEACHER RESPONSE TO STUDENT ANSWERS

Introduction

The Teacher Response to Student Answer (or Teacher Feedback) behaviors can be subdivided into Terminal (the interaction with that student ends and another student interacts with the teacher) and Sustaining (the interaction with that student is continued). You may wish to practise coding initially just by using these two broad subheadings before you tackle the more difficult job of discriminating among the categories under each subdivision (Terminal and Sustaining). Given the pace of classroom question-and-answer sessions, it is advisable to perfect your coding skill in incremental steps. Praise and Criticism are also included as teacher responses and will be considered first.

Praise

A great deal of controversy has appeared in the literature recently concerning the use of praise. Various conclusions resulting from these reviews are presented elsewhere (see page 4-27).

For our coding purposes, Praise goes beyond a simple acknowledgement and affirmation of a student answer by the teacher and is characterized by:

- pleasant intonation
- a warm personal reaction to the child (expressions or gestures connoting excitement or warmth)
- accompanying verbalization of positive feedback concerning the accuracy of the response
- a compliment to the student on a job well done
- an appreciation of student effort

Thus such expressions as:

"Good thinking!"
"Absolutely right!"
"Terrific!"
"I knew you could do it!"
"You certainly worked hard!"

are examples of praise. The more specific the praise feedback, the more meaningful it is to the student. For example:

a) "You did a nice job on that bookshelf."

b) "The bookshelf is constructed well. You made no hammer marks where you drove the nails in, the ends are sanded velvety soft, and the varnish is smooth and even with no running."

Both a) and b) are coded as "praise" but b) provides more meaningful feedback, or in Teaching Effectiveness terms, a "knowledge of results." Hence the student knows why the praise is deserved.

"Good girl" is an example of praise, but a student could construe that being a girl, and a good one at that, is the reason for the praise rather than for a particular accomplishment.

Other examples can be coded as "praise":

> "I really like that!"
>
> "That makes me happy."
>
> "I'm pleased that you did it that way."

But these could subtly foster a tendency on the part of the child to please the teacher rather than to take pride in doing the best possible job.

The perfunctory "good" ("fine"/"right") may, in fact, be more of an affirm response than Praise, depending on the enthusiasm with which it is said and the frequency with which it is used (overused). If the teacher response, in your view, is more than an impersonal communication of feedback information to the student, then praise should be coded. "Praise" can be coded in addition to "affirm."

Criticism

Teacher evaluative responses that exceed simple negation of an answer delivered in an impersonal manner (negate), and that convey anger, rejection, or a personal attack on the student should be coded as "criticism." Disparaging remarks referring to the child's work habits and ability level or making an unfavorable inference are examples.

> "You're slow finishing up, as usual."
> "That's a stupid answer."
> "You take no pride in your work."
> "We've been over this three times already, John. You should know it by now."
> "You're as bad as your brother Tom."

Such statements go beyond negating the accuracy of the student's answer and serve no useful purpose (except venting teacher frustration). The value to the student and to the maintenance of classroom climate are extremely questionable. Hopefuly, you will have little opportunity to use this coding category.

Sequence of Multiple Teacher Responses

Praise or Criticism may be coded in addition to the Terminal and Sustaining responses provided by the teacher. You may wish to preserve the sequence of these teacher behaviors for more than one or two of them could occur in reaction to a student answer. If so, you can tally a "1, 2, 3" to note both their occurrence and their order of occurrence.

> "Correct. You had to do a lot of reasoning there. Good work. Now why do you think they needed to have so much iron?"

Affirm - 1
Praise - 2
Sustain - new question - 3

Initially, just place tick marks in all appropriate boxes and you can become more sophisticated ordering them in due course. If you have no particular interest in preserving the sequence, don't complicate your life unnecessarily.

TERMINAL RESPONSE OPPORTUNITIES

Terminal feedback brings the student's response opportunity to a close. The interaction is not sustained and an additional response opportunity (Sustaining) is not created for the student by the teacher. Seven categories of Terminal Responses are now presented.

Affirm

The teacher indicated that the child has given a correct response by stating:

"Yes"
"Um-humm"
"Right"
"That's correct"
"Okay"

Perhaps the word "good," if delivered in a neutral tone of voice and, used frequently, is more of an "affirm" than teacher praise. A repetition (echo) of the student's answer is also coded as affirmation unless it is repeated quizzically (repeat question) signifying a question back to the student. (e.g., The camel is a jungle animal?).

The teacher may affirm an answer by (a non-verbal) nodding the head or by a smile, so you must be looking up to see these teacher responses to student answers.

Negate

The teacher indicates to the student that the answer is incorrect either non-verbally by shaking the head or verbally by such expressions such as:

"Not in this case."
"Sorry, that's wrong."
"That's not right."
"Uh-huh. (No)"
"I don't think it could be that."

If the feedback response exceeds this negation it may in fact be "criticism."

Process Feedback

This closely approximates a further explanation of the direct answer by the teacher. It may include the steps required to think through the answer or a variety of reasons why the answer is the right one. The teacher may explain why the student's answer is wrong. Process feedback occurs more often following errors but it may also follow correct responses if the teacher wishes to elaborate on the response or to verbalize the thinking process the answer represents. Examples are:

> "Yes, we know that we should use a capital letter since it is a proper name, and all proper names begin with capital letters."
>
> "John, in order to read the word you have to sound it out (followed by a demonstration of how to sound a word out). When you don't know the word, you can sometimes figure it out by thinking about the story so far and by looking at the picture...."

Gives Answer

The teacher provides the answer when it is not forthcoming from the student.

> "You need a capital letter."
> "John, the word is 'summative'."

Asks Other

The teacher does not provide the answer but asks someone else to provide it.

> "Does anyone know?"
> "Mary, can you tell me?"
> "Can someone help John?"
> "What is it, class?" (looking for a chorus response)

(It is sound practice to "return" to the faltering student as soon as possible with an opportunity for success so the student may "save face.")

Ignore

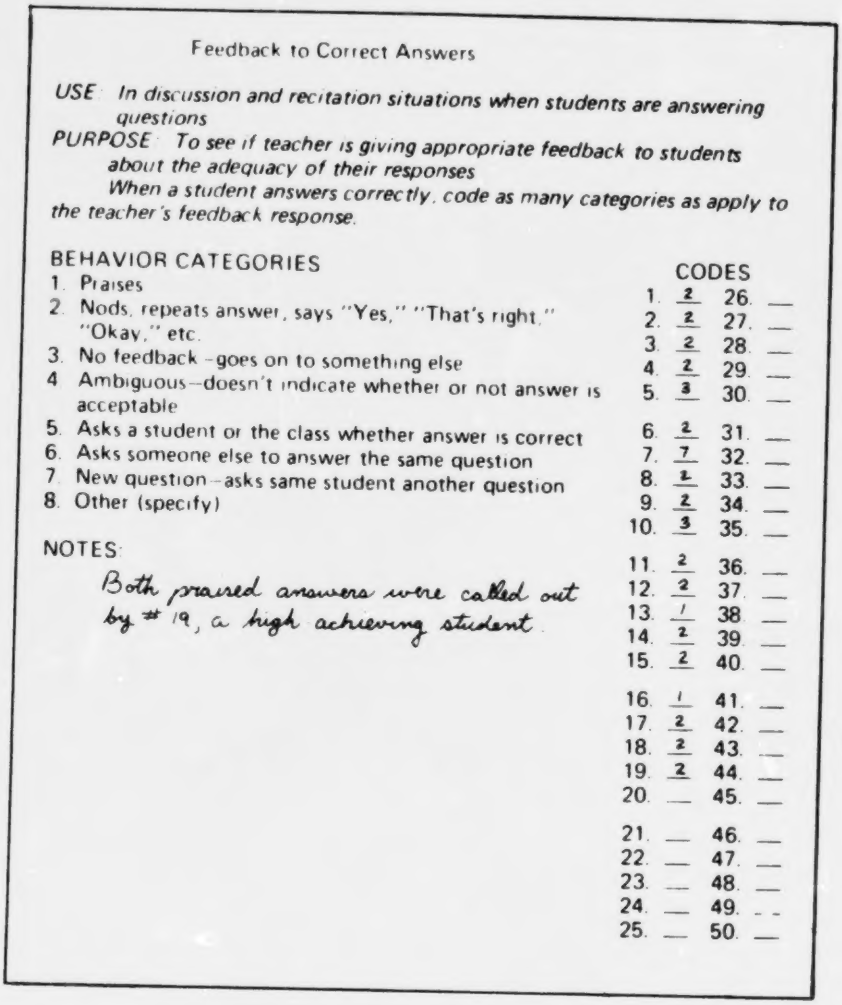
When a teacher does not respond to a student answer and merely proceeds to the next question/topic, this has the effect of terminating the student's response opportunity. Also teacher responses that do not communicate any information about the correctness or incorrectness of the answer may be coded as "Ignore" or as "No Response" if you wish to create another category. Examples of the latter type would be:

> "I never thought of that."
> "You think it's red."

FORM 4-2

CODING FORM FOR TEACHER RESPONSE TO STUDENT ANSWER

PRAISE	CRITICISM	TERMINAL RESPONSES							SUSTAINING
		AFFIRM	NEGATE	PROSFB	GIVANS	ASKOTH	IGNORE	CALLOUT	



Feedback to Correct Answers

USE: In discussion and recitation situations when students are answering questions

PURPOSE: To see if teacher is giving appropriate feedback to students about the adequacy of their responses

When a student answers correctly, code as many categories as apply to the teacher's feedback response.

BEHAVIOR CATEGORIES

1. Praises
2. Nods, repeats answer, says "Yes," "That's right," "Okay," etc.
3. No feedback—goes on to something else
4. Ambiguous—doesn't indicate whether or not answer is acceptable
5. Asks a student or the class whether answer is correct
6. Asks someone else to answer the same question
7. New question—asks same student another question
8. Other (specify)

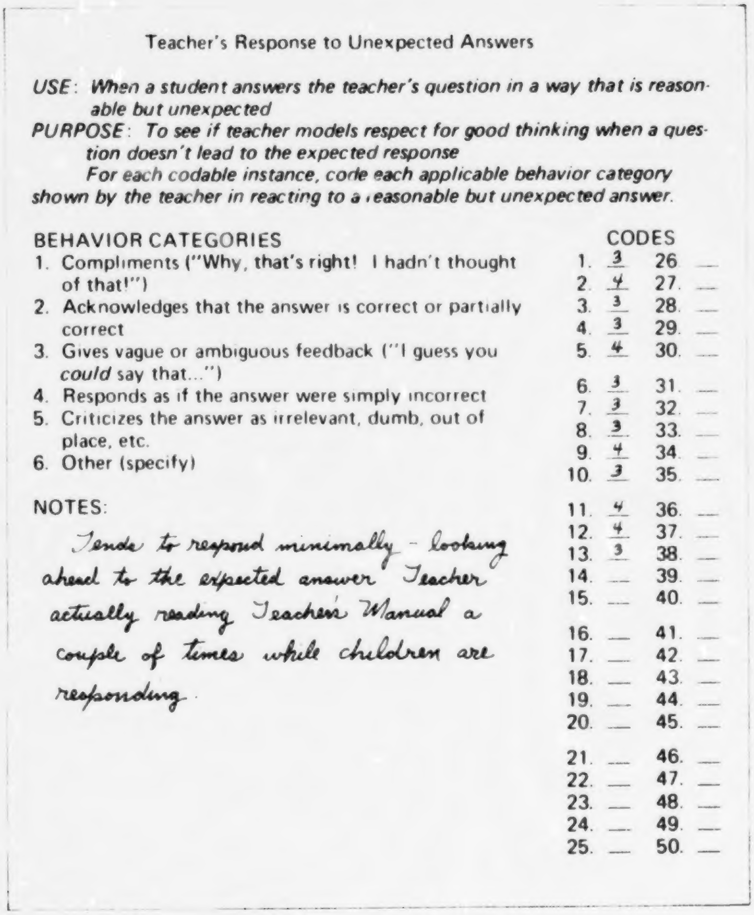
NOTES:

Both praised answers were called out by # 19, a high achieving student.

CODES

1.	2	26.	
2.	2	27.	
3.	2	28.	
4.	2	29.	
5.	3	30.	
6.	2	31.	
7.	7	32.	
8.	2	33.	
9.	2	34.	
10.	3	35.	
11.	2	36.	
12.	2	37.	
13.	1	38.	
14.	2	39.	
15.	2	40.	
16.	1	41.	
17.	2	42.	
18.	2	43.	
19.	2	44.	
20.		45.	
21.		46.	
22.		47.	
23.		48.	
24.		49.	
25.		50.	

Looking in Classrooms - Second Edition. Thomas L. Good and Jere E. Brophy, New York: Harper & Row, Publishers. 1978. page 374



Teacher's Response to Unexpected Answers

USE: When a student answers the teacher's question in a way that is reasonable but unexpected

PURPOSE: To see if teacher models respect for good thinking when a question doesn't lead to the expected response

For each codable instance, code each applicable behavior category shown by the teacher in reacting to a reasonable but unexpected answer.

BEHAVIOR CATEGORIES

1. Compliments ("Why, that's right! I hadn't thought of that!")
2. Acknowledges that the answer is correct or partially correct
3. Gives vague or ambiguous feedback ("I guess you *could* say that...")
4. Responds as if the answer were simply incorrect
5. Criticizes the answer as irrelevant, dumb, out of place, etc.
6. Other (specify)

NOTES:

Tends to respond minimally - looking ahead to the expected answer. Teacher actually reading Teacher's Manual a couple of times while children are responding.

CODES

1.	3	26.	
2.	4	27.	
3.	3	28.	
4.	3	29.	
5.	4	30.	
6.	3	31.	
7.	3	32.	
8.	3	33.	
9.	4	34.	
10.	3	35.	
11.	4	36.	
12.	4	37.	
13.	3	38.	
14.		39.	
15.		40.	
16.		41.	
17.		42.	
18.		43.	
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Looking in Classrooms - Second Edition. Thomas L. Good and Jere E. Brophy, New York: Harper & Row, Publishers. 1978. page 155

CODING FORM FOR STUDENT ANSWER AND TEACHER RESPONSE

	QUALITY OF STUDENT ANSWER						TEACHER RESPONSE TO STUDENT ANSWER								
								TERMINAL RESPONSES							
WHO	CORRECT	PARTLY	WRONG	DON'T KNO	NO RES	PRAISE	CRITICISM	AFFIRM	NEGATE	PROSFB	GIVE ANS	ASK OTH	IGNORE	CALL OUT	SUSTAINING

The writer gathered data in one elementary classroom where Ignore was the standard operating procedure. The children seemed to know that unless the teacher indicated the answer was incorrect, it must be correct. While this saves verbiage, the approach does not give students any knowledge of results as they contribute answers (except by the process of elimination).

Purposely "silly" answers contributed by students may receive an "Ignore" response from the teacher.

Call Out

If another child calls out the correct answer when the first child gives an incorrect answer or is unable to respond, use "call out" as the teacher response (even though the teacher did not respond). When this happens the teacher a) may turn attention to the call-out student and make a feedback response or b) may not turn attention to the call-out student. Thus "call out" is coded as a teacher feedback reaction whenever the child gets feedback from another child who in fact calls out the answer.

With this many possibilities for Terminal Responses you may be feeling overwhelmed. Examine the coding form and see if you know what all the terminal response categories mean. You may wish to practise with just a few categories at first. Stop reading now and do some coding from one of the practice tapes in Chapter Six.

SUSTAINING RESPONSES

Teacher responses to a student's answer that prolong the interaction with that student are termed "sustaining" and can be one of three kinds. When the second stage of the interaction begins (with the posing of the second question) the coder checks one of the "Sustaining" categories on line A (first horizontal line) and drops down to the next line (line B) and records the student identity (same as on line A) and the fact that the student has been "Preselected" to participate in this interaction. The type of question (already checked as one of the Sustaining types on line A) can be reclassified and coded as one of the question types on line B. Listen for the student answer and teacher feedback for the second question and code these. If the teacher asks a third question, then data on line C will also pertain to the same student who will now have had to answer three questions in a row. This is not an unusual occurrence. A new or rephrased question can follow swiftly on the heels of a "Terminal" response such as "great" or "absolutely right." Code everything that occurs but in your final analysis give priority to the Sustaining response if there is one.

You may merely be interested in noting that the teacher "probed the student for additional answers" but for now, try out this method. You will train yourself to hear a great deal of information.

Repeat Question/Rephrase/Give Clue

While the same question hangs in the air unanswered the teacher tries to find another way to pose it so the student will have a better chance of answering it successfully the second time. The teacher may repeat the question exactly as before in the event the student has not listened carefully enough. However, once more, louder, usually does not help the situation. A rewording of the question may help to clarify its meaning for the student. All versions of the original question that do not change its substance or intent are coded in this category.

(Repeating question)

> "What color? Well? Do you know?"
> "Do you know the word? Are you stuck? What is it?"
> "How does it feel? What do you think? Hmmm?"

(Rephrasing and giving clues)

> "It's the same color as a stop light. It's our new color for today. It begins with 'r'. It rhymes with 'bed'?"
> "Does he feel good or bad? Does he feel bad? Well, is he happy, sad, angry, or what? Look at his face. He's never going to see Sam again."
> "How would you feel if you were Johnny? How does he look?"

New Question

Differentiation between the category "Repeat/Rephrase/Clue" and "New Question" requires consideration of the teacher's apparent intent and the response demand placed upon the student. Is a different response being requested? Or is the teacher still trying to elicit the correct response to the original question?

"Are you stuck?" implies "Do you know the answer?" and is a Repeat.

(New question)

"What is the manager's problem?" followed by "Why does the manager have to be concerned about this?" would be an example of a new question posed by the teacher."

"Yes, and what color is this? What else is red? Are you wearing anything that's this color?"

"And how does Sam feel? Yes, how could you tell that he is sad? Then what happens? Why does he feel sad?"

SYMBOL	LABEL	DEFINITION
STUDENT SEX		
M	Male	The student answering the question is male.
F	Female	The student answering the question is female.
STUDENT RESPONSE		
+	Right	The teacher accepts the student's response as correct or satisfactory.
±	Part right	The teacher considers the student's response to be only partially correct or to be correct but incomplete.
-	Wrong	The teacher considers the student's response to be incorrect.
0	No answer	The student makes no response or says he or she doesn't know (code student's answer here if teacher gives a feedback reaction before he or she is able to respond).
TEACHER FEEDBACK REACTION		
++	Praise	Teacher praises student either in words ("fine," "good," "wonderful," "good thinking") or by expressing verbal affirmation in a notably warm, joyous, or excited manner.
+	Affirm	Teacher simply affirms that the student's response is correct (nods, repeats answer, says "Yes," "OK," etc.).
0	No reaction	Teacher makes no response whatever to student's response—he or she simply goes on to something else.
-	Negate	Teacher simply indicates that the student's response is incorrect (shakes head, says "No," "That's not right," "Hm-mm," etc.).
–	Criticize	Teacher criticizes student, either in words ("You should know better than that," "That doesn't make any sense—you better pay close attention," etc.) or by expressing verbal negation in a frustrated, angry, or disgusted manner.
Gives Ans.	Teacher gives answer	Teacher provides the correct answer for the student.
Asks Other	Teacher asks another student	Teacher redirects the question, asking a different student to try to answer it.
Other Calls	Another student calls out answer	Another student calls out the correct answer, and the teacher acknowledges that it is correct.
Repeats	Repeats question	Teacher repeats the original question, either in its entirety or with a prompt ("Well?" "Do you know?" "What's the answer?").
Clue	Rephrase or clue	Teacher makes original question easier for student to answer by rephrasing it or by giving a clue.
New Ques.	New question	Teacher asks a new question (i.e., a question that calls for a different answer than the original question called for).

Coding Categories for Question-and-Answer Feedback Sequences

Looking in Classrooms - Second Edition. Thomas L. Good and Jere E. Brophy, New York: Harper & Row, Publishers. 1978. page 54

SAMPLE DYADIC VERBAL INTERACTION CODING FORM 4-4

QUALITY OF STUDENT'S ANSWER					TEACHER'S RESPONSE TO STUDENT'S ANSWER													
					TERMINAL									SUSTAINING				
CORRECT	PARTLY CORRECT	WRONG ANSWER	DON'T KNOW	NO RESPONSE	PRAISE	CRITICISM	AFFIRM	NEGATE	PROCESS FEEDBACK	GIVE ANSWER	IGNORE	ASK OTHER	CALL OUT	REPEAT QUESTION, GIVE CLUE	NEW QUESTION	REPEAT CHILD'S ANSWER	WHO	TIME

Adapted from Good and Brophy, 1969.

Repeat Student Statement

The third category is probably used less frequently but is reserved for those instances when the teacher repeats the child's answer in a quizzical manner without indicating whether (s)he considers it to be correct or incorrect, or when the teacher restates the pupil's answer for the purpose of having the student confirm what he has just said.

> "The capital of Alberta is Calgary?"

The principal criterion is whether the teacher's intention was to sustain the student's involvement by having him clarify for himself or for others the meaning of his previous response or to correct it.

STUDENT-INITIATED INTERACTION

Student-initiated interactions may be an indicator that the teacher accepts student contributions during ongoing instruction and builds on this input if it has been appropriate. Acceptance of student comments and questions may also attest to the risk-taking behavior of students who feel they can add information to the lesson. If too much student-initiated interaction occurs it may indicate that the teacher is too influenced by students and allows them to steer the discussion instead of maintaining teacher control over the direction of the lesson. It may be of interest to you to count the frequency of student-initiated exchanges, and four categories are presented for your coding pleasure on forms 4-5 and 4-6. Incidentally, the writer refers to these interactions as "Sinits" (as opposed to "Tinits," Teacher-Initiated interactions).

The four Sinit categories included here are simply categorized as either Questions or Comments (from the student to the teacher) and Accepted or Non-Accepted (did the teacher choose to recognize the input as valuable and build on it or reject it for some reason?). As you suspected, more possibilities exist and are presented next in case you ever feel the need to further differentiate the Sinit categories. Obviously, for our purposes now the four categories will suffice. It is time now to look at how the students are selected by the teacher.

Teacher's Response to Students' Questions

USE: *When a student asks the teacher a reasonable question during a discussion or question-answer period*

PURPOSE: *To see if teacher models commitment to learning and concern for students' interests*

Code each category that applies to the teacher's response to a reasonable student question. Do not code if student wasn't really asking a question or if he or she was baiting the teacher.

BEHAVIOR CATEGORIES

1. Compliments the question ("Good question")
2. Criticizes the question (unjustly) as irrelevant, dumb, out of place, etc.
3. Ignores the question, or brushes it aside quickly without answering it
4. Answers the question or redirects it to the class
5. If no one can answer, teacher arranges to get the answer or assigns a student to do so
6. If no one can answer, teacher leaves it unanswered and moves on
7. Other (specify)

NOTES:

#7 Explained that question would be covered in tomorrow's lesson.

CODES

1. 4
2. 4
3. 1,4
4. 4
5. 4
6. 3
7. 4
8. 4
9. 7
10. 4
11. 4
12. ____
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48. ____
49. ____
50. ____

Looking in Classrooms - Second Edition. Thomas L. Good and Jere E. Brophy, New York: Harper & Row, Publishers. 1978. page 154

TEACHER RESPONSE TO STUDENT-INITIATED INTERACTION

A further description or two could be added to the type of Student-Initiated interaction (question or comment).

Call out can be coded if the pupil has called out the contribution instead of waiting until the teacher affords the opportunity to contribute. Relevant or Irrelevant can be checked, depending on whether the contribution pertained to the topic under discussion. An irrelevant comment from a student could be accepted by the teacher.

In response to the student's contribution the teacher can accept or not accept it. Other categories could be added such as:

Praise	
Criticism	
Ignore	- no teacher response provided.
Delay	- "I'd like to deal with that question later."
Accept	- "Okay, that's a good point/question."
Not Accept	- "We're not talking about the field trip right now." - "I've asked you before not to worry about margins."
Integrate	- "Mary has raised an excellent point here that ties in with our..." - "Here's another way of looking at this..."
Shift	- The teacher may shift the direction of the class discussion as a result of the student's input. - "Perhaps we should take advantage of the fact that Mrs. Hill might have time to talk with us now." - "Maybe we should spend a few minutes reviewing those guidelines."
Redirect	- The teacher does not respond to the student but takes the comment or question and asks another student to react to it or to answer the question. - "Bill, what do you think of Mary's suggestion?" - "Bill, Mary has asked for a reason why this has happened."
Long	- Long may be checked to indicate whether the teacher's feedback exceeded a few seconds.

If you ever end up examining verbal exchanges in great detail, as I did, these additional categories are very useful. Just tuck these suggestions away for now.

SELECTION OF STUDENT

Four categories are included in this segment of the dyadic interaction instrument.

Pre-Selected

The teacher names the pupil first and then asks the question.
"Mary, which Alberta hockey team won the Stanley Cup in 1984?"

Non-Volunteer

The teacher poses the question first but calls for a response from a pupil who has not had a hand up, indicating a willingness to respond.

> "What word in the paragraph means the same as 'paraphernalia'?"
> (pause) "Tom."

Sometimes the first response you get is "I didn't have my hand up." It is informative to ask the teacher later why particular non-volunteers have been chosen.

Volunteer

The teacher poses the question first but choses a respondent who has indicated (s)he would like to contribute the answer. This will sound the same as the previous interchange but you must look up to see whether the student is a "volunteer" or a "non-volunteer."

> "Why would you say the hero is in trouble at this point?"
> (pause) "Jean."

Call Out

The teacher asks a question but before (s)he can select a student to answer, a child calls out the answer. The teacher nevertheless responds to the child who called out the answer.

The teacher may discourage call outs by ignoring them and reminding students of the preferred classroom procedure for selecting students to answer. You can determine how many call outs there are and whether the teacher is consistent in the acceptance/rejection of call outs. Sometimes it appears to depend on who is calling out the response. This differential treatment communicates teacher attitudes and expectations to students.

The teacher may have used a non-verbal method to select this student such as pointing at him or tapping him on the shoulder. If you have not noted this because you have been looking down and recording data, you have a problem. In cases where you are not sure, code the selection as "call out" and try to be especially alert to pick up any subtle selection cues.

GROUPING MODE

It may be of interest to record the context in which the verbal exchange occurred. Writing the subject area content on top of the coding form is a good plan. One would almost expect to hear more factual questions in a review lesson and more challenging questions in a lesson where new concepts are being presented. Another aspect of the context is the (size) number of students in the instructional group. The teacher may ask higher order questions when working with a reading group or a small group in mathematics. Perhaps differences can be noted in the kinds of questions posed to members of the "Jets" group and to members of the "Turtles" group. Given the teacher's probable expectations for their relative success, it is not unusual to pick up differences of this kind. Frequently the teacher is not aware of this tendency and feedback on this teacher behavior is valuable.

One is able to pose to all students "higher order questions," which require them to think. The format of the questions may be altered to suit variation in intellectual levels but the answer required can involve the integration of several pieces of information and therefore can be a challenge to the student. By recording the context, you may be able to identify patterns of teacher verbal behaviors used in particular settings. If you record the identity of the student, a tally count later could reveal the predominant setting in which most interactions occur between the teacher and a specific student. The teacher may have most interactions with a lower ability student in one-to-one grouping modes, or interact most frequently with the brighter students during large group instruction.

For our purposes, three grouping modes will be used: individual, large group, and whole class.

Individual

Individual means "one child" and is to be checked when the teacher is presenting instruction to one child while the rest of the class is engrossed in independent seatwork. Do not check "Individual" when the teacher is asking a question to one child while the rest of the class, in the "Whole Class" setting, is included in the lesson and listening attentively. If it is a dyadic interaction, and not a choral response, the teacher will always be exchanging information with an individual student. In the grouping mode of one-to-one, the "Individual" category would be recorded.

Large Group

Some coding instruments differentiate between large group and small group (e.g., more than six, fewer than six students) contexts, which you may wish to do. For our purposes here, this category will mean a sub-group of the whole class.

Whole Class

As the category label suggests, this lesson is taught to all students in the class but those dyadic exchanges occurring between the teacher and one student in this whole class context are the foci for your coding on this particular instrument.

QUESTION TYPES

The reader is referred to the many excellent books and articles on questioning and question types in order to develop a broader understanding of the classification of questions. The pace of classroom verbal interaction requires that the coder instantly recognize which type of question has just been asked so that delays in categorization, which result in the loss of other information, will not occur.

Not all interchanges between teacher and student are suitable for our coding purposes. Only academic questions are of major interest to us in this learning package. When other types of questions (non-academic) are asked they may be ignored for the purposes of this coding instrument. A rhetorical question, for example, directed at the student or at the whole class is to be ignored.

> "Why can't life be simple?"
> "Do you think I am able to take care of all your belongings and my own stuff too?"

Questions such as "Did you remember to bring your science book back? Have you finished writing your composition?" are administrative in nature.

Any question beamed to the whole class, resulting in a chorus of answers in unison, is not suitable for our present purposes. One hastens to add that these other question types are of value but do not lend themselves to an examination of the dyadic interchanges that occur between the teacher and a single student. Some provision can easily be made for noting that such a question was asked and a column on the instrument entitled "rhetorical" or "other" could be inserted to record these as well.

Several different methods of classifying questions will be of interest to you. This manual labels question types as Product, Process, Choice, and Self-Reference but they could just as easily be called Convergent and Divergent, Evaluative, Probing, or Open and Closed. Work through one set of definitions for practice purposes and then decide which classification serves your purposes best when you adapt the coding instrument for your own use. Nothing is written in stone.

Product Question

A Product question is a question for which a single, specific, correct answer is sought. It might take the form of a simple factual recall type of question. It does not require the synthesis and integration typical of a more challenging (Process) question and the question does not usually provide the student with alternatives that include the right answer (as in Choice questions). Thus the student must know (or guess) the "right" answer and verbalize it to provide what the teacher is expecting to hear and accept.

Examples:

> "What (letter, number, day, shape, color, etc.) is this?
> Who (discovered the Rockies, is the prime minister)?
> What is a "Sinit"?
> When (is Heritage Day, was the first oil well operating, etc.)?
> Where (is Valleyview, do we buy food, etc.)?

What do we get from cows?
How many ______ are there?
How do you spell ________?
What do buses do?
What is this word?"
Name four terminal response categories.

Process Question

A Process question is a type of academic question that requires the integration of facts or a demonstration of knowledge of their relationships. It could be an application or synthesis of facts. The question itself tends to be "open-ended." It usually cannot be answered with a single word or a short phrase as can a Product question. Many different answers may all be perfectly acceptable.

Examples

"What can we learn from this story?
What does this saying/fable mean?
Why should we not play with matches?
How do new plants grow from old ones?
Why does it get dark at night?
How do you know that this is a "long e" sound?
Why is that a wrong answer?
What should you do if . . .?"

Finer distinctions in the Process question category could be made that would enable the coder to record comprehension, application, analysis, synthesis, and evaluation questions, respectively, as per the categories in Bloom's taxonomy (see page 4-22). However, in the heat of frantic coding, it becomes very difficult - not impossible, given the pace of verbal interaction, to code such fine distinctions. This problem can be overcome by recording the lesson on audio/video tape and subjecting the questions to more studied analysis later on. In fact, if the focus of your work with a teacher is refining questioning skills and formulating types of cognitive questions, you will need to redesign the instrument to include these more precise categories.

Choice Question

A Choice question may be distinguished by two criteria:

(a) The question deals with academic content and cannot be classified as a non-academic or self-reference question and

(b) The teacher provides (a) response alternative(s) either verbally or by showing the child visual aids in connection with the question that include the correct answer among them. There may be more than two alternatives provided.

Examples:

Is this (B or D); Monday or Tuesday; a square, circle, or a triangle; red or blue)?

> Which of these is (taller, tallest, smaller, blue, a vowel)? i.e., select the right answer from among the alternatives provided.
>
> Are these (the same, blue, circles, synonymns, etc.)? i.e., "yes-no" questions.
>
> Which four of these five things go together? "One of these things is not like the others. . . (Sesame Street)"

Coders should bear in mind that any question that is an "either-or" question or a "yes-no" question is coded as a choice question, regardless of the complexity of the content.

If you wish to reduce your categories to only two or three, these questions could be subsumed under the "Product Question" Category.

Self-Reference Question

A self-reference question might elicit the child's opinion, preferences, or personal experiences.

Examples:

> "How many of you have ever gone camping?
> Jean, where did your family go this summer?
> What did you see/do in Banff?
> When might you have occasion to use this stuff?"

This type of question is sometimes included in an activity that motivates interest in the lesson to come. It may form part of the set of preliminary questions that help the teacher to ascertain the level of prior knowledge.

Instrumentation

Five verbal interaction instruments are included here. You will find many similarities among them for they have all been derived from the work of Good and Brophy. The Ten Minute Observation (TMO) form was used in Project Quest, 1979 and again by Ratsoy (1980) to record verbal data for ten minutes continuously. The DIOS (Dyadic Interaction Observation System) was used by the writer in her own study, 1980. Many of the instruments throughout this text, which have been reproduced from Looking in Classrooms are designed for collecting specific kinds of verbal interaction data.

The last instrument, verbal High Inference Rating Scale (page 4-69), is a high inference instrument used after data have been collected on the low inference instruments.

SAMPLE DYADIC VERBAL INTERACTION RECORDING FORM 4-5

TEACHER-INITIATED																				STUDENT-INITIATED			
GROUPING MODE			QUESTION TYPE				PUPIL SELECTION				QUALITY OF STUDENT'S ANSWER				TEACHER FEEDBACK				WHO	TYPE OF INTERACTION		TEACHER RESPONSE	
INDIVIDUAL	LARGE GROUP	WHOLE CLASS	PRODUCT	PROCESS	CHOICE	OTHER	PRE-SELECTED	NON-VOLUNTEER	VOLUNTEER	CALL OUT	CORRECT	PARTLY	WRONG	OTHER	PRAISE	CRITICISM	TERMINAL RESPONSE	SUSTAINING RESPONSE	STUDENT	QUESTION	COMMENT	ACCEPT	NOT ACCEPT

Adapted from Good and Brophy, 1969.

SAMPLE DYADIC VERBAL INTERACTION INSTRUMENT FORM 4 - 6

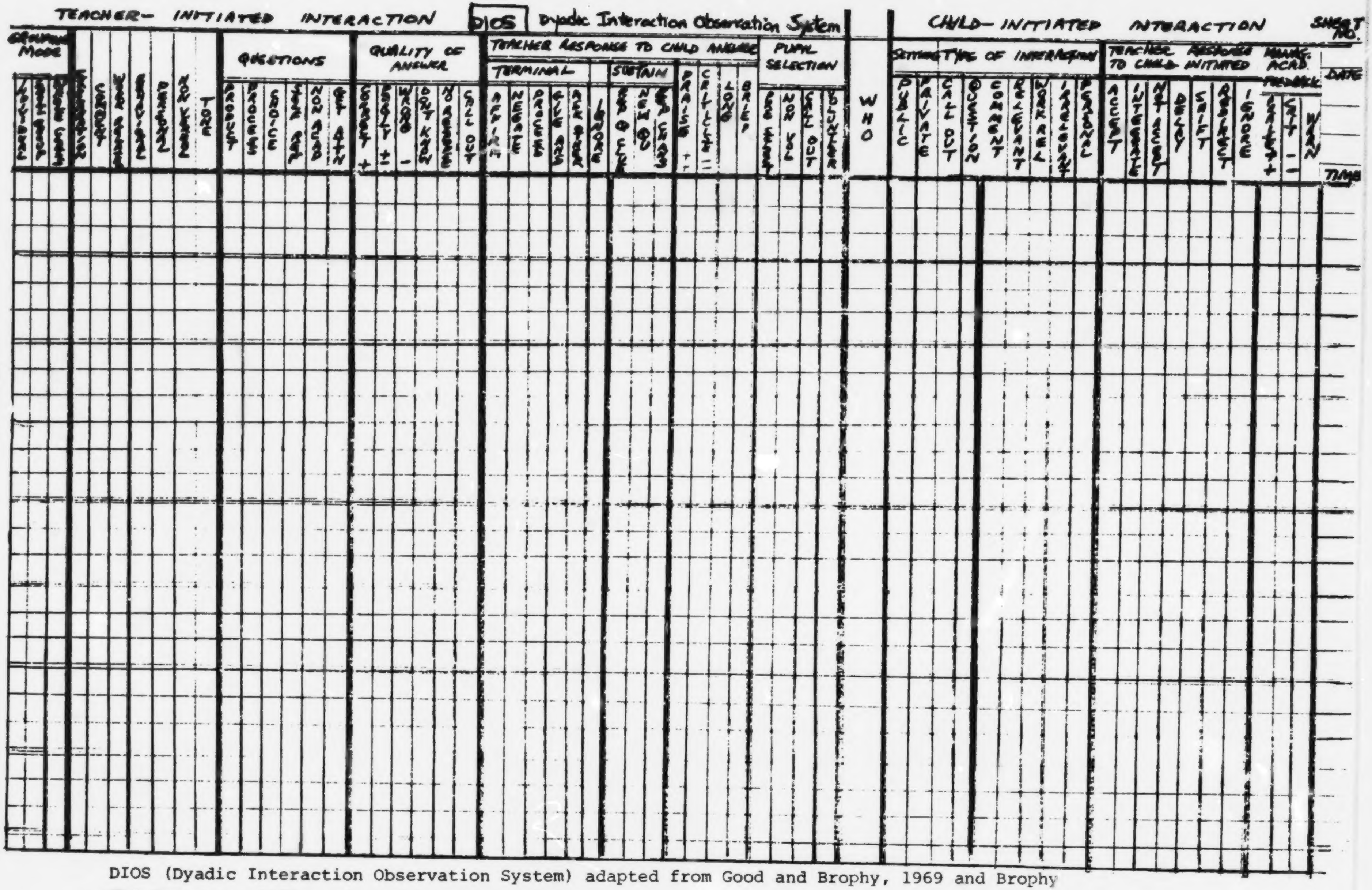
GROUPING MODE			QUESTION TYPE					PUPIL SELECTION				QUALITY OF STUDENT'S ANSWERS					TEACHER RESPONSE TO STUDENT'S ANSWER													STUDENT-INITIATED			
																			TERMINAL							SUSTAINING				TYPE		RESPONSE	
INDIVIDUAL	LARGE GROUP	WHOLE	PRODUCT	PROCESS	CHOICE	SELF REFERENCE	OTHER	PRE SELECTED	NON VOLUNTEER	VOLUNTEER	CALL OUT	CORRECT	PARTLY	WRONG	DON'T KNOW	NO RESPONSE	PRAISE	CRITICISE	AFFIRM	NEGATE	PROCESS FEEDBACK	GIVE ANSWER	IGNORE	ASK OTHER	CALL OUT	REPEAT QUESTION GIVE CLUE	NEW QUESTION	REPEAT CHILD'S ANSWER	WHO	QUESTION	COMMENT	ACCEPT	NOT ACCEPT

Adapted from Good and Brophy, 1969.

T.M.O. (Ten Minute Observation)

CHILD-INITIATED INTERACTION	TEACHER RESPONSE TO CHILD-INITIATED INTERACTION		Brief																
			Long																
			Redirect																
			Shift																
			Integrate																
			Not Accept																
			Accept																
			Delay																
			0																
			--																
			++																
	TYPE OF INTERACTION		Irrelevant																
			Relevant																
			Call Out																
			Comment																
			Question																
TEACHER-INITIATED INTERACTION	TEACHER RESPONSE TO CHILD's ANSWER	SUS-TAINING	Rep. Ch.Ans.																
			New Q.																
			Rep. Q.Clue																
		TERMINAL	Ask Other																
			Give Ans.																
			Process																
			Negate																
			Affirm																
			Ignore																
			Criticise - -																
			Praise + +																
	QUALITY OF CHILD's ANSWER		Call Out																
			No Resp.																
			Don't Know																
			Wrong -																
			Partly + -																
			Correct +																
	PUPIL SELECTION		Call Out																
			Volunteer																
			Non Vol.																
			Pre.Sel.																
	QUESTION TYPE		Self R.																
			Choice																
			Process																
			Product																
	GROUPING MODE		Whole Cl.																
			Large Gr.																
			Small Gr.																
			One Child																
			Who																

Adapted from Brophy and Evertson, 1973 and used in Project Quest, MacKay, 1979.



TEACHER- INITIATED INTERACTION **DIOS** Dyadic Interaction Observation System CHILD- INITIATED INTERACTION SHEET NO.

GROUPING MODE										QUESTIONS						QUALITY OF ANSWER						TEACHER RESPONSE TO CHILD ANSWER													PUPIL SELECTION				WHO	SETTING		TYPE OF INTERACTION							TEACHER RESPONSE TO CHILD INITIATED							MANAG. ACAD. FEEDBACK		
																						TERMINAL						SUSTAIN																														
INDIVIDUAL	SMALL GROUP	WHOLE CLASS	[illegible]	CONDUCT	WORK RELATED	PROCEDURAL	PERSONAL	NON VERBAL	TONE	PRODUCT	PROCESS	CHOICE	SELF REF	NON ACAD	GET ATTN	CORRECT +	PARTLY ±	WRONG −	DON'T KNOW	NO RESPONSE	CALL OUT	AFFIRM	NEGATE	PROCESS	GIVE ANS	ASK OTHER	IGNORE	REP & CLUE	NEW QU	[illegible]	PRAISE ++	CRITICIZE =	LONG	BRIEF	PRE SELECT	NON VOL	CALL OUT	VOLUNTEER		PUBLIC	PRIVATE	CALL OUT	QUESTION	COMMENT	RELEVANT	WORK REL	IRRELEVANT	PERSONAL	ACCEPT	INTEGRATE	NOT ACCEPT	DELAY	SHIFT	REDIRECT	IGNORE	PRAISE +	CRIT −	WARN

DATE

TIME

DIOS (Dyadic Interaction Observation System) adapted from Good and Brophy, 1969 and Brophy and Evertson, 1973, and used by Mireau, 1980.

VERBAL HIGH INFERENCE RATING SCALE

NOTE: For the following items, please use the five-point scale to indicate how *frequently* the behaviors occurred during the period observed.

1. Many different pupils were selected by the teacher, to respond to questions.

1	2	3	4	5	
LOW		MED		HIGH	N.O.

2. When pupils' answers were incorrect or only partially correct, the teacher used techniques such as rephrasing, giving clues, or asking a new question to help the pupil to give an improved response.

1	2	3	4	5	
LOW		MED		HIGH	N.O.

3. The teacher used praise to reward outstanding work as well as to encourage pupils who were not always able to do outstanding work.

1	2	3	4	5	
LOW		MED		HIGH	N.O.

4. The teacher used mild criticism on occasion to communicate expectations to more able pupils.

1	2	3	4	5	
LOW		MED		HIGH	N.O.

5. When pupils initiated interaction, the teacher accepted and integrated the pupil question, comment or other contribution.

1	2	3	4	5	
LOW		MED		HIGH	N.O.

* N.O. means "not observed."

Used in Project Quest, MacKay, 1979.

CHAPTER FOUR - APPENDIX

SAMPLE QUESTIONS (VERSIONS A AND B)

FIVE TRANSCRIPTS FOR CODING

INTRODUCTION

Sample Question Types (Versions A and B)

Twenty-two questions are provided in version A. Classify the questions using the question categories provided or a different classification system. Decide whether any of the questions are non-academic and, if so, whether you plan to include them in your own classification system. Version B presents the same twenty-two questions but for most of these you should be able to code the selection of students and whether or not "wait time" was provided. Examine each question to see if extra words that add nothing to the question itself have been included and try to restate the question leaving out the extra words.

Exercise #1 - Coded Transcript - Buried Treasure

This exercise was designed to include most of the dyadic verbal interaction categories used in Project Quest. The three "actors" had rehearsed in advance and with a slow pace performed the vignette in front of the coders-in-training. Most were convulsed and neglected to practise coding on the TMO (Ten Minute Observation) form. However, on a second attempt the exercise served its intended purpose. It was included just for fun and the coding decisions appear on the left hand side. Cover these up and try to decide how to code the dialogue yourself.

Exercises 2, 3, 4 and 5.

Exercises 2, 3, 4 and 5 were transcribed from lessons observed (and audiotaped) by the writer.

Exercise #2 - AP and AMP - was taken from a Grade 2 Language Arts Lesson where the teacher was eliciting words from the students.

Exercise #3 was recorded in Junior High School during a Language Arts lesson. The students work through a practice exercise with the teacher.

Exercises #4 and 5 were recorded with the same mathematics teacher in two different grade levels in Junior High School.

Using the transcripts, decide how you would code the verbal exchanges on a category system you feel comfortable using.

SAMPLE QUESTION TYPES: (Version A)

1. What is the capital of Alberta?

2. Why was Edmonton chosen as the capital?

3. In what ways are bees different from hornets?

4. Who was the former prime minister of Canada?

5. Do you have your workbook in your desk?

6. How do you form the contraction of "will not"?

7. Who can tell me what 12 times 7 is?

8. How do you make a cake?

9. What are four ingredients we put in the cookies this morning?

10. When do birds fly south?

11. Why do birds migrate southwards?

12. Which of A, B, or C, is the largest?

13. How did Dick feel when he saw the dog?

14. When have you ever felt like this?

15. Why do you think Dick reached for the book?

16. How many of you got them all right?

17. Who would like to tell me the name of the premier of Alberta?

18. Name the cities in Alberta.

19. How many cities are there in Saskatchewan?

20. Why are there fewer cities in Nova Scotia?

21. Who has visited Quebec and can tell me some of the things they saw there?

22. Does anyone know where Glace Bay is?

SAMPLE QUESTIONS TYPES (Version B)

1. What is the capital of Alberta, . . . Sue?

2. Why was Edmonton chosen as the capital, . . . Mary?

3. In what ways are bees different from hornets, Allan?

4. Who was the former prime minister of Canada, anyone? (choral response).

5. (To Tom) Do you have your workbook in your desk?

6. How do you form the contraction of "will not", Ted?

7. Who can tell me what 12 times 7 is, . . . Sue?

8. How do you make a cake, . . . Barbara?

9. Sue, what are four ingredients we put in the cake this morning?

10. When do birds fly south, . . . Mary?

11. Why do birds migrate southwards, Ted?

12. Which of A, B, or C is the largest, anyone? (choral response)

13. How did Dick feel when he saw the dog, Barbara?

14. When have you ever felt like this, . . . Mary?

15. Why do you think Dick reached for the book, . . . Ted?

16. How many of you got them all right? (show of hands).

17. Who would like to tell me the name of the premier of Alberta, . . . Mary?

18. Name the cities in Alberta, please, Tom?

19. Ed, How many cities are there in Saskatchewan?

20. Why are there fewer cities in Nova Scotia, Barbara?

21. Who has visited Quebec and can tell me some of the things they saw there, . . . Mary?

22. Al, Would you try and find Glace Bay on the map for us?

BURIED TREASURE

EXERCISE FOR CODING DATA ON THE DYADIC VERBAL INTERACTION INSTRUMENT

(Adapted from Good & Brophy, 1969; and Brophy & Evertson, 1973)

Al (Teacher) Len (Student) Laurie (Student)

(Cover the "answers" on the left and code the dialogue on the instrument)

CODING ANSWERS	DIALOGUE	
Pre-select Process question	Al:	Len, why do you think the mystery of Oak Island remains unsolved?
Partly correct	Len:	Because the people who were digging for the treasure ran out of money to finance the digging.
Affirm Sustaining Q	Al:	Yes, anything else? (Points to Len)
Process question Pre-selected Partly correct	Len:	Because the tide keeps coming in and covering up where they are digging. This makes it difficult to dig because the hole is such a long way down.
Affirm	Al:	Well, . . .sort of.
Student-initiated comment	Laurie:	Also, one man lost his life when he got trapped in the tunnel and I think that scared the other treasure seekers away.

Accept Integrate	Al:	Right, that's right. That was an unfortunate accident all right. I think that put a stop to digging for quite a while. They were certainly working in a dangerous spot.
Student-initiated Q	Len:	Why do they think there is treasure there anyway?
Delay or redirect	Al:	I am not sure. That's a good thing for you to go look up in the library, Len, and let us know. Okay, Laurie?
Process question Volunteer Wrong answer	Laurie:	Maybe it was on television and the treasure hunters saw it on the program.
Negate Criticize	Al:	Aw, come on. . . . There was no TV then. Think when the digging started many years ago. We have only had television around for the last 25 years or so. Try to think before you come out with something like that.
Student-initiated comment	Len:	Maybe there was a map or something and someone found it.
Accept Praise	Al:	Good suggestion, Len. I imagine you're right. Makes more sense than the answer Laurie gave us about the T.V. If someone had found such a map they must have been really excited. . . . Imagine!
Student-initiated comment	Laurie:	My aunt has a map of the city of Edmonton. She keeps it in her car.

Not accept	Al:	That's not what we are talking about just now.
Student-initiated comment	Laurie:	But you can find things by looking at it. . .and places, too.
Accept Integrate	Al:	Yes, but the map the pirates made wouldn't have so many names on it and streets. . . probably a much simpler map. . . not too many clues on it, I shouldn't think, in case it fell into the wrong hands.
Student-initiated Q	Laurie:	What's a "clue"?
Not accept Pre-select product Q	Al:	It's something you don't have. Len, can you tell us how pirates used to mark the place where the treasure was buried?
Correct	Len:	With an "X."
Affirm Self-reference Question	Al:	Right, Len. Where would you hide a chest full of gold coins?
Call out Partly correct	Laurie:	I'd dig a hole in the ground and put a big pole sticking up out of the place so I could find it again later when I wanted it.

Affirm Sustaining New question	Al:	Okay, but what would someone else think if they were walking along and saw a big pole sticking out of the ground?
Pre-select Right	Laurie:	They might think there was something buried under it.
Sustaining New question	Al:	So. . .?
Correct (Teacher ignores)	Laurie:	I guess that wouldn't be such a great idea.
Student-initiated comment	Len:	Maybe you could put a smaller marker there . . . not so noticeable.
Accept Self-reference Question	Al:	Then what could you do if you weren't coming back for another year or so? The stick would be gone by then perhaps. Len?
Non-volunteer Don't know	Len:	I don't know.
Terminal Ask other	Al:	Laurie?
Non-volunteer Partly correct	Laurie:	Um. . .ah. . . ! If you dug beside something important then you could remember it was beside that, somewhere.

Ignore Self-reference Question	Al:	But how would you remember exactly where you dug the hole and buried it?
Points to Laurie (volunteer) Partly correct	Laurie:	(Hand up) You could write that down, too.
Affirm Ask other	Al:	Oh? But isn't there a simpler way? Who can think of one? Len?
Volunteer Correct	Len:	Maybe you could make a map yourself.
Affirm Praise Product question	Al:	Terrific. I was hoping you would say that. It makes me think we can get somewhere with this lesson after all. Good. What things would you put on the map? . . . Len? (Volunteer)
Call out	Laurie:	I'd put the treasure spot on.
Affirm New question Sustain	Al:	Well yes, of course. But is that all you would have on your map?
Pre-select	Laurie:	Yes.
Negate Sustain Repeat question	Al:	Yes, that's about what I thought. However, we do need more than one X on the map. Now think. . . !

Pre-select Correct	Laurie:	Oh, oh, the big rock, or the lake, or whatever important thing you buried it beside.
Affirm Praise Process question	Al:	Now you're on the right track. See what good answers you can give when you just think before you open your mouth? That's good, Laurie. How much more information should you have on this map, Len?
Hand up (volunteer) Correct	Len:	You can't put too much on, like the name of the place it is near, in case someone else found it and dug it up before you came back. You'd have to be careful.
Affirm Praise	Al:	Right, Len. Good point. Not too many clues on it.
Student-initiated question	Laurie:	What is a "clue"?
Accept Redirect Pose as product Question	Al:	Len, can you tell Laurie what a "clue" is?
Pre-select Correct	Len:	I think it's a kind of hint to help you know something. It suggests what the answer is without telling you the whole thing.
Affirm Choice Q	Al:	Yes. Now what would you do first? Draw the map or bury the treasure?

Call out	Laurie:	I'd bury it first.
Sustaining Q	Al:	Why?
Pre-select Partly correct	Laurie:	Because you are in a hurry, right? And besides, how can you draw a map if you don't know for sure where the treasure is buried?
Affirm	Al:	Okay, that's right. . . ! (ad nauseam)

EXERCISE FOR CODING DYADIC VERBAL INTERACTION DATA

(transcribed from an audiotaped lesson in Grade 2)

AP + AMP

T - Two sounds

ap and amp . . .? . . .

We're going to make a couple of charts. The first one is ap.

What sound do you have with ap? Melissa, give me one word.

ap.

T - Okay, that's the sound, now can you give me a word? Snap?

. . . (break) . . . Bill?

Nap.

T - Spell it.

N-A-P.

T - That's right. Good.

. . .

T - That's right, how would I spell it?

T-A-P.

T - Right. Another one, Thomas?

Apple.

T - Does that end with ap?

No.

T - What sound am I looking for?

ap.

T - Okay, give me a word using the sound you started with.

Wrap.

T - All right, we have that one, don't we? Try another one.

Call out: Oh, I know one.

T - Say it.

. . .

T - What's the word? What . . .?

Lap.

T - Spell it.

L-A-P.

T - Um hum. Okay -- another one, Brett.

Strap.

T - Spell it.

S-T-R-A-P.

T - Okay, another one, Bill?

Rap-tap-tap.

T - Okay, that's sort of like wrap -- which word don't we have? Which is the new one that you're saying? Rap . . .

Tap.

T - Okay, spell tap. Spell it, Bill. Go ahead.

T-A-P.

T - Right. Another one. Trish. You got one?

Wap.

T - What is a wap.

When you hit someone.

T - Is it a wap or a whack? What's the word?

Whack.

T - How many people say it's whack? That's right. It's not the right sound. It doesn't end with the right letter. Another one, Jason.

Slap

T - Okay, Spell it.

S-L-A-P.

T - Okay, Juanita?

Trap.

T - Spell it.

T-R-A-P.

T - Good girl. Okay, Allison, did you have one?

No.

T - Melissa, what's yours?

Gap.

T - Spell it.

G-A-P.

T - What's a gap?

It's something you eat.

T - No. Can you give me a sentence with the word gap? Who can give me a sentence? Brent, can you give me a sentence?

- There was a gap in the . . .

T - What's another word for a gap? Can you give me another word? What is a gap?

A small hole.

T - A hole. That's right. Another word please, Jeffrey.

Yap.

T - Spell it.

Y-A-P.

T - Another one, another one, Jason.

Sap.

T - Okay, spell it.

S-A-P.

T - What's sap? What's sap? Todd, do you know what sap is?

Sap from a tree . . .

T - A tree . . .right. Another one. Cheryl.

Burlap.

T - Burlap! That's a good one. How would I spell that one?

B-R-

T - No, you need something else. B-

B-U-

T - uh hum

R-

T - and

L-A-P.

T - Good girl.

* * *

AMP Words

Clamp.

T - Pardon me. Could you spell it?

C-L-A-M-P.

T - What's a clamp? Pardon me?

I heard of it.

T - Hands up. Who knows what a clamp is? Do you know what it is, Alfred?

. . .

T - Oh, you mean "clomp, clomp." Clomp, clomp. That type of clomping along? No, this is clamp he's talking about. What's a clamp?

I don't know what it is.

T - Do you know? Todd?

A clamp is when your arms clamp together, sort of.

T - Okay. Clamp together. Tie together. Or a clamp attaches onto something. There is a clamp. It clamped on. It clipped on. Oh, you have a clamp down there. Ian? What would you like?

Can I go to the washroom?

T - All right, you may go. . . . Are you supposed to be doing that now? What's the rule, Thomas? What's the rule?

Don't play in class.

T - So what happens when you play in class with it? What happens?

You take it.

T - Okay, put it on my desk. You know the rules. If I see it, I take it. Put it on my desk. Either you put it on the desk or I'll come put it on the desk. That's your choice. Thank you. All right, Melissa.

Scram.

T - Scram. What's a. . .? We want amp, don't forget.

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EXERCISE FOR CODING DYADIC VERBAL INTERACTION DATA
(Transcribed from an audiotaped lesson)

LINK VERB

T - Use the word "rub" as a transitive verb. . . . Rod?

I will rub the polish.

T - Okay, I will rub the polish until it shines. Use it as an intransitive verb, Sandy?

We rubbed gently.

T - Okay. We rubbed gently and you have it this way. "Rise." Can you use "rise" as a transitive verb? Pam?

It will rise to the top.

T - It will rise to the top. Intransitive or transitive?

T - Intransitive. Okay. Can you use "rise," Maurice?

I will rise . . . the elevator.

T - I will rise? No, you'd raise the elevator. Okay, there are certain verbs that cannot be used too easily in the transitive form. You have to be aware of these types.

T - Now, on page 277 you have a link verb. A link verb links the subject with an adjective phrase that describes it. It does not show action. The adjective phrase can be an adjective alone, an adjective with a qualifier, or a prepositional phrase with an adjective meaning. The italicized words in the following sentences are link verbs. Our street seemed empty. "Seemed" is your link verb. "Empty" would be what? Bill?

Adjective.

T - Okay. It would be an adjective. The air felt damp, very damp. What is your verb here? Carrie?

"Felt."

T - "Felt." And what's your "damp" in this case? Robin?

An adjective.

T - Okay, it's an adjective. With an intensifier in front. The building looks, looked like ghosts. The verb is "looked." What's "ghosts" in this case? Todd?

It's the object of the preposition "like," which is an adjectival prepositional phrase describing ghosts.

T - Good! Complete and to the point. The fog grows thicker. Ellery? Your verb?

Your verb is "grows."

T - Okay, and "thicker" would be what?

An adjective.

T - Okay. Many link verbs like "look," "sound," "smell," "taste," and "feel," relate to our five senses. "Become," "seem," and "remain," can also be used as link verbs. The link verb and the adjective phrase that follows it are used in this sentence pattern. Noun phrase, link verb, plus adjective phrase. Complete each of the following with a link verb. And you have 10 sentences here . . . looking at your first one . . . what would you put in there?

Um -- Sandra?

Summer feels sticky.

T - Okay, summer feels sticky. Could you put anything else in there, David?

Is

T - "Is" -- well that would make it a be verb rather than a true link verb.

(Same student) Seemed

T - Okay, you could have seemed sticky, taking it in the past tense there. "Carrots" -- Richard?

Carrots looked stiff.

T - Ooh, they might "look" stiff. Um?

(Other) They feel stiff?

T - Okay, they feel stiff, and that would be the way you could tell. You can't look, well, I guess you could look stiff in this, but they feel stiff is much better than that. My shoes? Alex?

Looked shiny.

T - Okay. My shoes looked shiny.

T - Deer? Lisa?

Deer seemed very shy.

T - Deer seemed very shy. Your voice? Karen?

Your voice sounds like gravel.

T - Your voice sounds like gravel. This fudge? Tammy?

This fudge seems like gravel?

T - Read the same sentence. This fudge?

This fudge seems too gummy.

T - Too gummy. Okay. The problem? Brad?

This problem looks worse.

T - Okay. Or? Sandy?

This problem seems worse.

T - Seems worse -- or? Rick?

This problem becomes worse.

T - Becomes worse. You could have different variations here. This bread . . . this bread . . . Carrie?

This bread smells like morning.

T - Smells like morning. How does morning smell?

Oh, like bread. (Fresh?)

T - Okay.

T - Could you put anything else there? Todd?

I don't see how you can compare morning and bread. It seems like they're too different.

T - Yeah, it's kind of an odd one to put in, I think, but I'm not the author of the book so that's all right. The air, Lauren?

The air seems electric.

T - Okay, it may seem electric but . . .

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EXERCISE FOR CODING DYADIC VERBAL INTERACTION

(Transcribed from an audiotaped lesson - Junior High Math)

POLYNOMIAL

Teacher: Okay, how would you subtract using polynomials? What type of polynomials are there first of all, Richard?

Student: Bi . . . binomials.

Teacher: Right. So how do you subtract the second binomial from the first? Richard?

Student: Well, I think the only way is, like you take the $2x^2$ and you subtract if from $6x^2$ and then the negative, well it could be negative x, like x^2 plus negative x. It would just have to be subtracted from the zero 'cause you can't take it away from the 7x. Er, no . . . no!

Teacher: Zero

Student: No, take that away. Change it, like lx, take that away from 7x, so it would be 6 negative, no, 6x.

Teacher: So what you're saying is line them up somehow like this. Subtract $2x^2$ -x. So now this is our minuend and our subtahend. And you're saying $6x^2$ minus 2x is equal to $4x^2$ and 7x minus x is equal to 6x?

Student: No. 5x.

Teacher: 5x?

Student: Yeah, 'cause it's negative. It would be a negative on x.

Teacher: What would be the coefficient of the x up here?

Student: One.

Teacher: One. 7 minus one is. . .?

Student: Six.

Teacher: Six. Okay, you're saying that this is 6x. How do I know what sign to put in here? Positive or negative? Plus or minus?

Student: Well, if you, you know, on the bottom one if you change it to a, to a plus sign, then it's a negative.

Teacher: If I say plus a negative, and 7 minus a negative one x is 6x?

Student: . . . (mumble)

Teacher: There's a little bit of confusion here about this term and the sign that goes here. How can we remove that confusion for once and for all. Lisa?

Student: You can change all the signs to addition.

Teacher: Yes, okay. So from the original question if we change everything to addition then we can remove that confusion. There are two things here that are a little tricky. So what is the new statement, Lisa?

Student: $6x^2$ plus 7x . . . plus negative $2x^2$ plus x? Negative x.

Teacher: Right, negative x. Okay, now remember that subtracting is the same thing as adding the additive inverse. Whether we're working with whole numbers, or fractions, or decimals, or things of this type, binomials subtracting can be changed to adding of the additive inverse. Now, this little sign in here implies that we are adding the additive inverse of this binomial. So the next thing that we do is remove the parentheses and treat it as a total addition. So what is this statement if I remove the parentheses now, Alex?

Student: $6x^2$ plus 7x plus negative 2x plus x.

Teacher: Okay, that is correct. 'Cause this negative sign over here implies that the sign of everything within here changes to its inverse. The additive inverse of a positive 2x is a negative 2x; the additive inverse of a negative x is a positive x. Now we collect like terms the way we have done in previous objectives. So which two can be combined here? Tyler?

Student: $6x^2$ and negative $2x^2$.

Teacher: They give us?

Student: $4x^2$.

Teacher: $4x^2$. Correct. We've taken care of that one and that one. And? Continue, Tyler?

Student: . . . and 7x plus the x is 8x.

Teacher: Plus 8x. Okay. Now up here, just getting back to the example up here, it can be done in a vertical order like this - subtrahend under a minuend. But we have to remember here, Richard, that we have a positive 7x. We are subtracting a negative x. So positive minus a negative is the same as 7x plus a positive x. So this would be an 8x . . . $4x^2$. Now you can do it this way if you're not confused about it but if you are having the slightest bit of problem if you change. . .

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EXERCISE FOR CODING DYADIC VERBAL INTERACTION

(Transcribed from an audiotape of Junior High School Math)

FRACTION TO DECIMAL

Teacher: . . . Okay, would you please turn to page ____. I'd like to just explain how to do it. Okay, yesterday we've taken up Objective Number 7 and 8 and Objective Number 8 is where we put it all together. You convert any type of fraction to a decimal, decimal to percent, and vice versa. Now, it might help you to label the top four columns on page 12. Over top of the first column just put "basic fractions." Write that right in your book, basic fractions . . . first column mark. In your second column: "fraction with a denominator of 100." And in the third column: "a decimal" (bell rings). And in the final column: "percent." Now, I'll take a couple of examples up here on the overhead to show you how it can be done. (Pause while he writes.) . . . Okay, for example, if in this column we have a 2/5, then that value two fifths should be able to be converted to a fraction with a denominator of 100, to a decimal and to a percent. Now, it doesn't matter which order it is in as long as you can fit in these three values. Bob, can you change a fraction to one of these? Take your choice.

Student: Okay . . .

Teacher: Which one are you trying to do?

Student: Forty over a hundred.

Teacher: Okay, forty over a hundred. Okay, and could you convert two fifths to a decimal and tell us how you would do it as well, . . . Arnie?

Student: Well you would change it to a . . . value . . . (mumble).

Teacher: Okay, if we in our minds change it to four over ten then the denominator stands for the place value. So what decimal would that be?

Student: Point four.

Teacher: Point four, Okay. And yesterday we've taken up changing decimals to percents and percents back to decimals. How do we change a decimal to percent? Mike?

Student: Put the zeros two places to the right . . . I mean the decimal two places to the right and put a percent sign.

Teacher: That is correct. From here we move the decimal two places to the right, which means we have to add a zero place holder and include a percent sign. Okay, so you can see that this value, two fifths, is equivalent to forty over a hundred, is equivalent to point 4, is equivalent to forty percent. This is the way in which we will do the page. Now, I'd like to give you another example. It won't always be the fraction that is given to you. Sometimes it may be the decimal. If we have point thirty six (0.36) and we can covert this value, decimal .36, to a fraction with a denominator of a hundred, a basic fraction . . . (while he writes) . . .point 36 to a percent first of all, Robert?

Student: Move the decimal point (mumble) . . . thirty six percent.

Teacher: Right, as we did up here. Thirty six percent. Point three six as a fraction over one hundred?

Student: Thirty six over one hundred.

Teacher: Right, thirty six over one hundred; and to change it to a basic fraction, of course, we simply reduce thirty six over a hundred. What is the basic fraction, Dianne?

Student: Nine over twenty five.

Teacher: Nine over twenty five. What did you divide this fraction by to reduce it?

Student: Four over four.

Teacher: Four over four. Okay. So we have done all these in the previous few objectives and as I mentioned at the outset, this is where we put it all together. Now, the pages to be done for the remainder of the period . . . Objective #7 is page 10, Objective #8 is pages 11 and 12. Now, this will take you most of the period. About twenty five after nine, I'll stop and take up page number ___. (He circulates while they work independently.) Question Jill? Do you have a question?

Student: Do we have to put what you were saying on top of these columns?

Teacher: No, no, no! On page 12! Right here, you blew it!

Student: Yeah.

Teacher: That's okay.

Student: I did something wrong here 'cause, like, I did every one of these and I still got a row left at the right end.

Teacher: Well, it's the ones that aren't crossed out that you have to use.

Student: Can you use all of them? Do you go in two rows?

Teacher: Um . . . yeah. . . ! This would be one word, the second word, the third word, the fourth, the fifth, and the sixth . . . (student question) . . .Let's see. How many questions were there? 1, 2, 3, 4 . . . 14, 15 . . . 25. Have you crossed out 25 of them? Check that out.

Yes, Gail?

Student: For this one here, they have a decimal in here.

Teacher: Um, hmm.

Student: But this one has a decimal too but it doesn't have a dec . . .

Teacher: Which number? Which page? Number. . . right here?

Student: This one.

Teacher: Where is this one? 6.875?

Student: Yeah, right here.

Teacher: And you're converting that to a percent. So what do you do?

Student: Well, you'd have to move the decimal two places?

Teacher: To the right. And you'd have to put in a percent sign, so you've done that correctly. Now, what's the other one that's in question here!

Student: This one.

Teacher: Seven?

Student: Oh, I didn't have (mumble) the two places.

Teacher: Yeah, that's right. You see, here, by moving it two places, you don't get way to the right of the number. You get only into here. But in this one, by moving it two places you get directly to the right of the number. That's why there is no decimal in here. You always move it two places. Okay?

Student: Okay.

. . . (skips to where he corrects with class) . . .

Teacher: 0.965 equals 96.5%, and 0.245 equals 24.5%; 0.005 equals [illegible]. . .0.5%.

Okay, the next three, Brenda?

Student: 0. . . . 0.5%.

Teacher: Would you repeat that one please?

Student: 0.045%.

Teacher: No, percent.

Student: Oh! Point zero four five equals 4.5%.

Teacher: Okay.

Student: 47.3 equals 4,730% and 6.875 equals 687.5%.

Teacher: Okay, the next three, Arnie?

Student: . . . (mumble) percent. Point ninety nine equals 99% and 62.5 equals 6,250%.

Teacher: Right. The next three, Jill, please?

Student: 7.75 equals 775%, 6.005 equals 600.5%, and 0.003 equals 0.3%.

Teacher: Right. Okay, then finish them off please, Steven?

Student: 0.21 equals 21%. 1.49 equals 149%, 37.06 equals 3,706% and 0.625 equals 62.5%.

Teacher: Yes. And what is the message? "What is the main purpose of the human skin." Bonnie? (Riddle included in the assignment.)

Student: To hold your bones together.

Teacher: And is there a rule then for changing decimals to percents? Quite simply, it is? Carol?

Student: To move the decimal two places to the right.

Teacher: And one other thing?

Student: Um . . . oh! Put a percent sign.

Teacher: Right. On page 11 we're doing the opposite. We're now converting percent to decimals. So how do we convert percents to decimals? Carla?

Student: Drop the percent sign and move the decimal point two places to the left.

Teacher: That is exactly right. Okay. For tomorrow finish pages 11 and 12. Away you go.

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Chapter Five

Interpersonal Interaction Skills

2
11
9
+2
11
6
+3
9

CHAPTER 5

INTERPERSONAL INTERACTION SKILLS
HIGH INFERENCE SKILLS

INTRODUCTION

The behaviors included in this chapter each are a composite of several behaviors and are, therefore, more global in nature. Eight are drawn from the work of Kounin (1970) and they represent overarching qualities desired in teachers. Most of the more specific behaviors included in the preceding modules fit comfortably under these broader headings. Some are less easily described than others (Warmth versus Teacher Clarity, for example) but through careful observation, less obvious cues and indicators are detected. A rating on these eight characteristics should only be assigned after considerable observation, analysis, and thinking. Usually inferences have to be made about the degree to which a teacher possesses and exhibits these personal qualities.

The writer is using the suggestion of two of her University students who memorized these eight behaviors by making the word "cowswemp" out of the initial letters. The catch phrase became "a teacher with cowswemp . . ." (clarity, overlappingness, withitness, smoothness, warmth, empathy, momentum and persuasiveness).

Video - Introduction and Overview

Chapter Five video information is on tape 5-1 (Accession number ____________).

VHS 0000 - Graphics

VHS 0020 - Introduction and Overview

CHAPTER FIVE - MODULE ONE

CLARITY

(Clarity of Instruction)

"Clarity - the extent to which a teacher's meaning is clear in presentations to the class."

Teachers who are rated high in clarity spell out the purpose of the lesson, give good directions, provide accurate examples, model the behavior or finished product, check for student understanding, and summarize the main points in a lesson. Their concern is that students comprehend and are able to do follow-up assignments. Other indications of teacher clarity are the use of precise language, well-enunciated speech, and legible blackboard printing/writing. More details concerning this teacher attribute are presented in Chapter Three (pages 3-45 to 3-51).

The sequence of presentation contributes to clarity because lesson components are given in a logical order. One part builds on the next and students see a gradual step-by-step unfolding. Little confusion is evident. The teacher checks at intervals to make sure students understand each step before proceeding to the next. ("Any questions or comments?") The teacher's planning skills in the task analysis stage are crucial so the parts of the lesson can be sequenced appropriately.

Use of vague language ("several" countries, "some" colours) does not clarify the concepts being taught. The teacher should model a precise use of language and should use words at the right level of difficulty for students. When a new word is encountered, the teacher should check to see that students do know what it means. Teachers concerned with clarity exhibit this behavior often. They stop short and ask for a definition or give an explanation of what something looks like or what function it performs. You will see this teacher drawing diagrams on the chalkboard or acting something out at the front of the room.

Clear enunciation of words and speaking at a level loud enough to be heard distinctly by all students in the room is another indicator of teacher clarity.

One way to obtain data on clarity is to pay close attention to the set of directions the teacher gives to students before asking them to begin a task. If the teacher has accompanied the explanation with a modelling of the process or of the desired end result, students should be able to proceed without difficulty.

Video - Clarity

A description of teacher clarity is presented (VHS 0109).

3/4" 119
VHS 0131
Yours

Illustration A - Grade 11, Biology

Student asks what a coloform is. Peter at the blackboard writes "E Coli" which reminds the student of a previous lesson. E Coli bacteria are found in the large intestines of mammals. In order to check for the presence of coloforms in water you use a millipore apparatus. (T. draws diagram on chalkboard and gives explanation). If coloforms are present, they will interact with the agar on the filter paper changing its color from purple to yellow. Coloforms will grow and become visible and can be counted. You can use that as a comparative figure for similar processes.

3/4" 170
VHS 0194
Yours

Illustration B - Grade 2/3, Language Arts

Heather is seated at her desk giving students individual help with their spelling. "You forgot the R the first time, Tanis. Caleb - let's see. Add a suffix (a page from his L. A. workbook) -an ending." Student does not understand. Teacher explains that a suffix is an ending you take off. The root word left behind still makes sense. Student understands and says "Oh, Oh, Oh!" and heads to his desk to fix his answers.

3/4" 188
VHS 0214
Yours

Illustration C - Grade 10, French

With the passé composé verb forms you need parts of the verb "avoir" and a past participle. (Denise writes this on the chalkboard). Yesterday I worked. Hier, j'ai travaillé. Today he eats, yesterday he ate. Today I telephone, three days ago I telephoned. Teacher writes "Tu as telephoné."

3/4" 224
VHS 0262
Yours

Illustration D - Grade 12, Math

On the chalkboard Ted provides an overview of the work the class has been doing. "This is the ninth class out of twelve. A week from today there will be a unit exam. . . Following this, the last part of the year will be review in preparation for the final exam on June 21. In this unit we have done rationale, definitions, identified what a complex number is, and have done four operations. . . Today we will graph a complex number and solve equations. This is a capsule look of where we've been and where we're going".

3/4" 278
VHS 0331
Yours ______

Illustration E - Grade 8, Art

Ron crouches beside two girls, providing individual help. He draws a bit of their flower for them and explains what he is doing. He impresses on them that he is not outlining so he doesn't have to connect all the lines. He shows how to make the petals curl up and down in the drawing. "You have to build it up slowly. You can go back and put detail in."

By explaining terms, drawing diagrams on the chalkboard, and modelling the desired result teachers provide clarity of instruction.

CHAPTER FIVE - MODULE TWO

OVERLAPPINGNESS

(Concurrent Tasks Management, Classroom Problem Management)

> **"Overlappingness - the extent to which a teacher is able to attend to more than one issue at one time."**

Overlappingness refers to the teacher's ability to demonstrate proficiency in concurrent tasks management. Akin to the juggler, the teacher has to keep several activities operating at the same time. For example, while the teacher is working directly with a reading group, the remainder of the class must be gainfully employed and supervised. The effective teacher is able to process several sets of information at the same time (because of a high level of awareness) and to manage to attend to several competing demands in a calm, organized way that does not interrupt the main activity.

Video - Overlappingness

A description of overlappingness is given (VHS 0379). This skill is especially needed when the teacher is working with a small group and the rest of the class is engaged in independent work. It presumes "awareness" and "a workable set of classroom management strategies" are already in the teacher's repertoire. Three examples are included.

3/4" 327
VHS 0394
Yours ______

Illustration A - Grade 2/3, Math

Heather has the grade three students at the back table supervising them as they fill in a clock worksheet. They must write the time (she provides orally) both digitally and by drawing in the two hands of the clock. She must also supervise the grade two students who are in their seats working. She looks over at the Grade Two students to make sure they are on task while she continues to work with the Grade Three students.

3/4" 379
VHS 0463
Yours ______

Illustration B - Grade 1

Faye has a series of quick interactions with students as she monitors their work. She responds to questions and comments from all directions in a calm, relaxed manner. "How do you think you spell 'Rogers'? Where are the square papers?" A student tells her he was sitting in the wrong desk. She helps a student spell "night".

3/4" 405
VHS 0497
Yours

Illustration C - Grade 2/3, Language Arts

Heather asks the Grade Two's to use a different color to underline the se in each of the words they are studying (e.g. house, horse, mouse). She checks on the Grade Three's who are also working on language arts activities. They have to substitute initial consonants with "whispered sounds", th and sh. She returns to the Grade Two's who are ready to underline with her.

CHAPTER FIVE - MODULE THREE

WITHITNESS/AWARENESS

(Teacher's Awareness)

"With-it-ness - the extent to which the teacher is aware of what is going on in the classroom."

Teachers who have a high degree of awareness, position themselves strategically so they can see as many students as possible, scan the classroom frequently to assess what students are doing, and walk around the classroom to monitor students in closer proximity. This constant vigil allows for early detection of potential sources of trouble. The "with-it" teacher acts on these cues immediately so that trouble seldom gets a chance to brew. More details concerning this attribute are found in Chapter Two - Module One.

This attribute also involves more than just sensing the potential for off-task behavior. For example, it includes noting confused looks on student faces when explanations are needed. At a more global level, it is the teacher's awareness (of the needs and academic level of each student) that governs the selection of teaching techniques designed to assist each student to experience success in school.

Video - Withitness

An introduction of the behavior is included (VHS 0529). The teacher must be aware, and must take immediate corrective action, preferably non-verbal, if a problem is detected. Being preventative and "on the move" serves to discourage potential misbehavior.

3/4" 447
VHS 0553
Illustration A - Grade 10, French   Yours ____________

Denise works with students in a small group but looks up and around to see whether students in other groups are on task.

3/4" 452
VHS 0560
Illustration B - Grade 2/3, Language Arts   Yours ____________

Heather works with students individually at her desk yet keeps tabs on what other students are doing at their seats.

CHAPTER FIVE - MODULE FOUR

SMOOTHNESS

(Clarity of Instruction, Time on Task)

> **"Smoothness - the extent to which teacher behavior facilitates the smooth flow of the lesson."**

In large measure, this behavior depends on thorough pre-lesson planning so delays can be avoided, materials can be ready, and transitions can be organized so that one section of the lesson blends into the next with the least amount of confusion and disruption. Problems that do surface are minimized with a timely response and by the use of low-key techniques.

Video - Smoothness

A description of smoothness is presented (VHS-0567). This behavior includes conducting smooth transitions from one activity into the next. Also, the use of time is important and the ability to "keep things moving" without a rush or disorientation. Certain teacher behaviors such as changing one's mind, long pauses, or digressions interfere with smoothness by interrupting the continuity of the lesson.

3/4" 471
VHS 0585
Yours ______________

Illustration A - Grade 1, Math

Faye completes one activity with her students by asking what 84 means. (8 tens and 4 ones) and 4 means (no tens, 4 ones). She gathers up the number cards they have been using while they pair up with a partner and sit down on the floor to get ready for the next task. She gives each pair an envelope in which there are 5 number squares. The students are to work together to arrange the five numbers in order.

3/4" 493
VHS 0614
Yours ______________

Illustration B - Grade 9, Social Studies

After presenting information about Peter the Great, Ron asks students to take a minute to jot down a few notes. While they do this, Ron saves time by passing out the textbooks they will need later on in the lesson.

3/4"	510
VHS	0638
Yours	

Illustration C - Grade 5/6, Language Arts

As students finish up the discussion they have had while seated on the floor in a circle, Jim informs them of the activities that will happen next. Students return to their seats and the teacher waits for silence before beginning a lesson on the writing of mystery stories.

CHAPTER FIVE - MODULE FIVE

WARMTH

(Feedback to Pupils, Praise and Encouragement/Criticism, Classroom Problem Management)

"Warmth - the extent to which the teacher provides evidence of 'caring,' 'accepting,' and 'valuing' of the children..."

The teacher is concerned about maintaining a positive classroom atmosphere and with promoting mutual respect and cooperation. Honest liking for students as individuals is revealed through behavioral indicators like physical proximity to students. Bending over to listen more attentively to young students or placing a hand on the shoulder (or a partial hug) often convey teacher appreciation of the student. Older students may resent touching but will respond to a sense of humor (a bit of teasing), eye contact with a twinkle or a wink, smiles, and comments stated in a pleasant tone of voice. Concern is shown for student welfare and words and actions must be congruent. Much of the teacher's credibility is based on these behaviors and on the fairness and the respect displayed towards students.

It is sometimes difficult for observers to agree that a particular teacher exhibits this high inference attribute. In younger grades it is easier to detect physical contact and praise. In older grades, however, other indicators may be displayed. A pleasant expression and tone of voice, allowing a class joke, or chatting with the students before and after class may be the kinds of indicators of warmth more usual with teachers of the older grades.

Video - Warmth

Warmth and empathy are described in one introduction (VHS 0677). Warmth is an affective response displayed toward the students by the teacher. It may be revealed in a sense of humor as well.

3/4" 557
VHS 0701
Yours ____________

Illustration A - Grade 7, Math

As Merv passes out answer papers for the math quiz he greets a student who has missed some days at school. "Welcome back. Nice to see you again."

3/4" 561
VHS 0707
Yours ____________

Illustration B - Grade 1, Language Arts

Faye asks a student when her mom and dad are going to Toronto. She reminds her, "Remember, if you need extra hugs you know where to go." She holds one girl's hand while she talks to another student.

3/4" 573
VHS 0723
Yours ____________

Illustration C - Grade 11, Biology

As the class ends, Peter sends them off with a pleasant, "Go away! Have a good evening!" As students mingle with him after the bell is rung, he jokes with a boy and answers other students' questions.

3/4" 583
VHS 0736
Yours ____________

Illustration D - Grade 12, Math

As Ted dismisses the students he refers to tonight's hockey game and says, "Go, Oilers, Go!" This sparks some bantering about betting on the winning team and which team will be the winner.

3/4" 594
VHS 0751
Yours ____________

Illustration E - Grade 11, Biology

A student asks Peter a complicated question to which he replies jokingly, "Next question. You're asking me?" He then explains that the log value is already included in that number.

CHAPTER FIVE - MODULE SIX

EMPATHY

(Praise and Encouragement/Criticism, Individualization of Instruction)

> **"Empathy - the extent to which the teacher responds accurately to both obvious and less obvious meanings, feelings, and experiences of the children."**

Sympathy includes appreciation of the child's particular situation and feeling sorry for him but empathy conveys understanding and the willingness to make adjustments and assist the child to succeed in spite of the recognized problems. The empathic teacher acknowledges the difficulties the student faces and discusses student feelings about these. The student realizes the teacher is sensitive to his set of circumstances and is trying to help him cope with the problem, to put it in perspective, and to support and encourage his efforts in this regard.

Video - Empathy

Descriptions of the two behaviors (warmth and empathy) are presented together, although there are slight differences between them. Empathy implies that the teacher is sensitive enough to understand how the child feels (without pitying him) and to make allowances for his individual needs. Six examples of empathy are presented.

3/4" 600
VHS 0760
Yours ______

Illustration A - Grade 5/6, Language Arts

While Jim circulates checking on student progress, he asks a student how he has hurt his shoulder. The student tells how he had an accident with his bike. "Ouch! It will be alright? You're not in too bad shape then?"

3/4" 609
VHS 0771
Yours ______

Illustration B - Grade 2/3, Math

At the back table a student tells Heather that he wants something to rest his arm on so he won't do such terrible printing. Heather suggests that he pull up closer to the table and helps him to push his books up further. To this special needs student she says, "You can do it, I know you can . . . Hmm - having a tough time with that today, eh?"

3/4" 621
VHS 0787
Illustration C - Grade 1, Language Arts Yours ______

Helen asks the students to state questions they have been wondering about and she writes their questions on the chalkboard. One of the students watching her says, "You write so fast." Helen assures them that when she was in grade one she printed slowly too. It didn't happen all at once. It took a lot of practice.

3/4" 629
VHS 0798
Illustration D - Grade 1, Language Arts Yours ______

As the students come in and get settled, Faye notices a big fly bite on one of the students. She reminds him to take off his jacket so he won't be too warm and notices that he has a cold too.

3/4" 635
VHS 0806
Illustration E - Grade 12, Math Yours ______

Ted checks on a student who has missed some classes because of a sporting event. He inquires whether the student feels confident about the information reviewed and taught during the class and asks whether the student is now caught up.

3/4" 641
VHS 0814
Illustration F - Grade 2/3, Language Arts Yours ______

While Heather listens to the grade two's doing oral reading she notices that her special needs student has not yet returned to his seat after his group finished listening to an audiotaped lesson at the back table. The teacher assists him to his seat while continuing to interact with the grade two student who is reading orally.

Instrumentation

Teacher shows energy, enthusiasm and concern for children.

1 Low	2	3 Med	4	5 High	Not Observed

Notes

- projects interest in subject matter of lesson
- shows (s)he enjoys interacting with the children
- listens carefully to and shows interest in the children's responses
- builds onto student answers
- Shows empathy and consideration for children's problems and concerns

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(Adapted from MacCannell and Young, 1980.)

CHAPTER FIVE - MODULE SEVEN

MOMENTUM

(Pace of Instruction, Academic Learning Time, Task Oriented/Businesslike Orientation, Flexibility)

"Momentum - the extent to which teacher behavior maintains the pace of the lesson."

Much like teacher "smoothness", momentum depends on the teacher's skill in planning the lesson so that possible glitches are anticipated and ways to keep things clipping along briskly have been devised. The teacher tries not to interrupt ongoing instruction and through "awareness" and "concurrent tasks management" is able to ensure that things keep moving.

The teacher can slow down the lesson when it is inappropriately fast by speaking more slowly, pausing, and programming in more examples and more student involvement. Likewise, when the lesson is lagging the teacher is able to liven it up by introducing techniques that accomplish more work in a shorter time. Minor points will receive less elaboration, fewer students will get a chance to express their views, and fewer examples will be provided. The teacher monitors the pace of the lesson by taking cues from students (based on confused or bored expressions) and adjusting it to suit the situation. You will see the teacher keeping an eye on the clock so that all aspects of the lesson can be covered in the time available.

Video - Momentum

A description is presented (VHS 0837). Teacher behavior maintains the pace and can speed it up or slow it down if adjustments have to be made. Notice the pace of interaction in the three included examples and in other video clips. Decide whether the pace seems to be appropriate and how one could change it if a change is desired.

3/4" 667
VHS 0849
Yours ______

Illustration A - Grade 12, Math

Ted takes a complex number and puts a question on the chalkboard. He will go through the four operations. He asks students to provide the answer to the "i" portion and the "non-i" portion. They multiply and get four mini products. He works at a fairly brisk pace.

3/4" 685
VHS 0875
Yours ____

Illustration B - Grade 1, Language Arts

Helen discusses with the class a story called "Making the Bed". Together they think of the questions they wonder about as the story progresses. The teacher writes these questions on the chalkboard. She slows down the pace to focus the students on these questions.

3/4" 702
VHS 0898
Yours ____

Illustration C - Grade 7, Math

Merv asks students to turn to the questions on page 108. They will do a few together orally before they try to do them in their exercise books. The questions require that the student translate a story problem into a mathematical statement. Merv uses wait time with his questions and allows students time to think.

Instrumentation

Teacher alters pace by using different kinds of activities.

1 Low	2	3 Med	4	5 High	____ Not Observed

Notes

Indicators

- uses more/less time to elicit student answers/examples
- allows for student movement (from desks to back table)
- provides opportunities for students to work in pairs, small groups
- uses a variety of audio-visual materials

(Adapted from MacCannell and Young, 1980.)

CHAPTER FIVE - MODULE EIGHT

PERSUASIVENESS

(Enthusiasm, Understanding of Instructional Goals, Flexibility, Clarity of Instruction)

"Persuasiveness - the extent to which the teacher is able to motivate students."

Persuasiveness in no way reflects the negative, coercive methods sometimes used to "persuade" students to work. This attribute is a mixture of the teacher's personal charisma and the enthusiasm the teacher generates for learning. Good and Brophy describe enthusiastic teachers as displaying alertness and vitality. They are

> alive in the room, they show surprise, suspense, joy and other feelings in their voices and they make material interesting to students by relating it to their experiences and showing that they themselves are interested in it (1978: 354).

These teachers build meaning into the learning by making the purpose clear and by linking it to knowledge students already possess.

Teacher enthusiasm is infectious and the teacher's sincere interest in the topic is relayed to students.

"If teachers appear to enjoy knowledge in general and specific subject matter in particular, students are likely to develop similar interests (page 354)." Good and Brophy cite McCaleb and White's (1980) findings that "students and observers are prone to overvalue enthusiasm and to rate enthusiastic instructors highly even when their presentations lack substance or clarity (1984: 341)."

This is a caution worthy of our attention as observers, for a flashy, dynamic presentation may, indeed, sway our perception and appear to compensate for any instructional deficiencies. Razzle dazzle can blind us.

Video - Persuasiveness

A short description of the behavior is presented (VHS 0925). The teacher is able to motivate students and has personal magnetism and charisma. This enthusiasm is infectious, especially if students are supported, encouraged, and treated with respect.

3/4" 731
VHS 0937
Illustration A - Grade 1, Language Arts
Yours ______

Faye uses support and encouragement to persuade a little girl (who is not working on writing her story) that she has something she can write about and illustrate. The girl seems more interested in doing the task after the conversation. They discuss how she helped her mother to plant flowers by digging 300 holes on the weekend.

3/4" 749
VHS 0963
Illustration B - Grade 11, Biology
Yours ______

Peter adds an element of mystery and interest by alluding to a "magic number that comes out of nowhere," which they must use to calculate the Species Diversity Index.

3/4" 755
VHS 0972
Illustration C - Grade 8, Art
Yours ______

Ron does some demonstration drawing for two girls who have not begun to draw their flower. After they still seem unwilling to tackle it he asks if they would prefer to draw a lilac instead. They agree and he gets one and sets it on their table. "Let's see you try. You said that's what you wanted. I'll come back and check."

3/4" 776
VHS 1000
Illustration D - Grade 12, Math
Yours ______

In teaching permutations and combinations, Marilyn chooses examples of interest to the students. They figure out the chances of having all 6 numbers in the 649 Loto draw.

Instrumentation

Teacher chooses learning experiences that motivate the students.

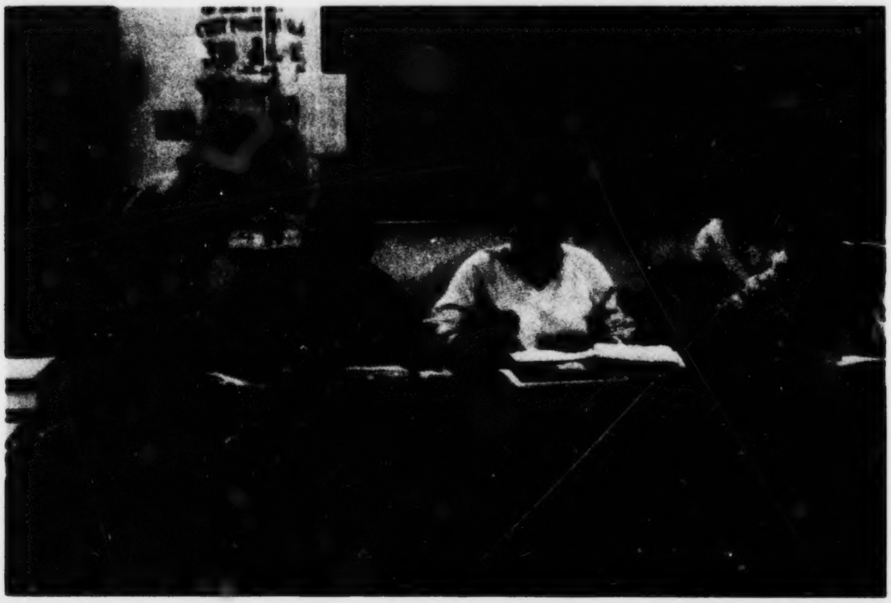
1 Low	2	3 Med	4	5 High	Not Observed

Notes

Indicators

- makes links back to previous learnings
- relates lesson to children's lives
- adds meaning
- uses student names in examples and story problems
- captures student interest and enthusiasm

(Adapted from MacCannell and Young, 1980.)



Introducing Lessons, Activities, and Assignments

USE: When the teacher is introducing new activities or making assignments
PURPOSE: To see whether or not the teacher pictures school work as worthwhile or enjoyable

Observe teacher behavior when introducing activities and making assignments. For each codable instance observed, record the numbers (consecutively) of each category applicable to the teacher's behavior.

BEHAVIOR CATEGORIES

1. Gushes, gives overdramatic build-up
2. Predicts that group will enjoy the activity
3. Mentions information or skills the group will learn
4. Makes no attempt to motivate, starts right into activity
5. Apologizes or expresses sympathy to group ("Sorry, but you have to . . .")
6. Bribes, promises external reward for good attention or work
7. Warns group, or reminds them, about test to be given later
8. Threatens punishment for poor attention or work
9. Presents the activity itself as a penalty or punishment
10. Other (specify)

NOTES:

CODES

1. 4 26. ___
2. 1,5 27. ___
3. 1,3 28. ___
4. ___ 29. ___
5. ___ 30. ___

6. ___ 31. ___
7. ___ 32. ___
8. ___ 33. ___
9. ___ 34. ___
10. ___ 35. ___

11. ___ 36. ___
12. ___ 37. ___
13. ___ 38. ___
14. ___ 39. ___
15. ___ 40. ___

16. ___ 41. ___
17. ___ 42. ___
18. ___ 43. ___
19. ___ 44. ___
20. ___ 45. ___

21. ___ 46. ___
22. ___ 47. ___
23. ___ 48. ___
24. ___ 49. ___
25. ___ 50. ___

Looking in Classrooms - Second Edition. Thomas L. Good and Jere E. Brophy, New York: Harper & Row, Publishers. 1978. page 109

CHAPTER FIVE - MODULE NINE

RESPECT AND TOLERANCE

Another important consideration is the extent to which a teacher displays a true respect for each individual student and for students in general. We may all have had the unfortunate experience of having a teacher who misused the position of entrusted authority to make inappropriate remarks or to "pick" on one of the students in the room. Students feel helpless in the wake of such an attack for to argue with the teacher or to lodge a complaint would surely bring some form of retribution. Although nothing might be done to rectify the situation, no one is able to ignore sarcasm and innuendo and students lose respect for a teacher who displays verbal and nonverbal behaviors of this type.

The teacher serves as a key role model for adult behavior. Students watch the teacher's reactions to the unexpected and the ways the teacher deals with frustrating events. Part of what we look for under interpersonal teaching attributes is evidence that the teacher does recognize and value the individuality of each student. While the individuality of some students is a little harder to value, the teacher owes each student the personal respect he deserves. When altercations do arise, the teacher should keep comments focused on the problem and not on the student. In the heat of the battle, it is tempting to add remarks that qualify as "personal attacks that wound". Describing what the student has said and done (the facts) and not making too many inferences is the better plan. The same teacher behaviors as recommended for the power struggle (see page 2-38) are usually appropriate.

When controversial topics are introduced, the wise teacher acknowledges them as contentious issues and alerts students that there are two sides to every story. Aspects of both sides should be presented for consideration and bowing out at this point is often the best course of action. The teacher must guard against presenting strong personal biases and opinions as "the truth" or as the only way to look at an issue. In teaching students to think and judge for themselves, these discussions should be kept open-ended and, if too controversial, avoided altogether. There is the potential for misusing one's influential role to inculcate one's own strong beliefs and a teacher must be wary of overstepping the bounds of appropriate behavior.

It is usually part of the teacher's conscious agenda to serve as a positive role model in this regard and an observer can pick up indicators to support this. Routine politeness is encouraged between the teacher and students and among students. The teacher may intervene in student-to-student interactions to remind students to be courteous and respectful to each other. Encouraging students to listen to each other's opinions and responses without being interrupted by other students is one example.

Video - Respect and Tolerance

A description is presented (VHS 1018). The teacher must recognize and accept the limitations of students. The teacher acts as an influential role model. Part of the hidden curriculum in ongoing instruction is the teaching of social skills and acceptance of others.

3/4" 800
VHS 1033
Yours ______

Illustration A - Grade 7, Math

Merv models politeness in his verbal interactions with the students. "Melanie, begin please. . . . Good. Thank you. Dean, please . . . I'm sorry, would you repeat your answer please?"

3/4" 806
VHS 1042
Yours ______

Illustration B - Grade 5/6, Language Arts

During the class discussion on peer pressure and problem solving, the example of being pressured into shop-lifting was raised. Jim applies the problem solving steps to this situation. "Assume you're the one being pressured. What's the problem? What do you do? What do you think is right? How do you do it? How do you indicate to him you won't? If the friend persists in abusing the friendship, perhaps one should end this friendship.

3/4" 824

VHS 1066

Yours ______

Illustration C - Grade 7, Science

Merv discusses how toxic wastes, if not eliminated from the body, can cause serious health problems, and even death. He shares a tragic personal story about a family member. He explains how a dialysis machine cleanses the blood. A man who takes dialysis treatments will come to the class, to visit soon and will explain how the dialysis machine works as part of the students' study of how wastes are eliminated from the body.

3/4" 847

VHS 1099

Yours ______

Illustration D - Grade 1, Math

As Faye circulates to monitor seatwork she (a) reminds a student that it is acceptable to express anger but not with one's fist, (b) asks a student to let another student "do his own thinking" and figure out the answer for himself, (c) reinforces the honest behavior of a student who found an item and brought it to her so the real owner could be found, and (d) overheard one student saying the word 'stupid' and said, "Excuse me, I don't allow anyone to call my children names. That's a put down . . . only good things."

VHS 1124 - Credits

Tape 5-2 **Ric Rosborough** Accession Number ____________

Perspectives for Living
Human Sexuality
(lesson approximately 33 minutes)

VHS

0000 Graphics

0018 Introduction and overview

0074 Ric explains that this class is the fifth in a series on Human Sexuality. Today they will explore what it is like to be pregnant, to have a baby, and then to take care of that baby. Ric reminds them that anytime they are sexually active, girls run the risk of becoming pregnant. Even the safest form of birth control is not 100% sure.

0138 "Once the egg and sperm unite an embryo is formed. What's the first sign that she's pregnant? If you have been sexually active then what would you do? (go to a doctor) He does a test on you and finds out whether you are pregnant. What is another sign of pregnancy?"

0219 Babies gain weight very rapidly. Ric says his baby daughter has tripled her weight in the seven months since she was born.

0247 They discuss the multiple births announced in this week's news. A lady gave birth to seven babies. "Do you know why she had so many babies?" They talk about monozygotic and dizygotic twins and how they are formed.

0276 Doctors think that this multiple birth may have resulted from seven different eggs. The lady had been taking a fertility drug.

0331 They discuss how it is possible to see an unborn baby with the aid of an ultrasound machine. It is possible to see the baby's head and arms and to watch the baby move and turn around. It breathes the amniotic fluid in and out.

0358 Ric tells them about the events surrounding the birth of his baby daughter and of going to the hospital and watching the birth. In about four or five days the mother is able to take the baby home. At that point it is up to the parents to care for it.

0426 "How often does the baby eat? Would you feed the baby every two hours or on demand?" He asks them to pretend to assume the responsibility for caring for their brand new baby for a week. They are to think of all the jobs that need to be done and to do them. Feeding is one job, as well as diapering, washing clothes, and bathing the baby. "You have to love it and take care of it. Does it love you back?"

0531 Ric shows them the pretend baby he will take care of for the week. It is a raw egg and he asks each of them to get one to take care of during the coming week. They can name it, put hair on it, dress it up, etc. but they are to experience the responsibility of having to care for it on a schedule.

"Bottles have to be sterilized and boiled so they are not going to give the baby problems. Bed clothes have to be changed and washed. Diapers have to be changed and either washed or disposed off - if they're disposable, you have to buy new ones." They are allowed to bring the baby back and forth to school with them provided they do not disturb other classes.

0619 Although he cannot monitor the extent to which they play the role of the parent or assign a mark to their effort, Ric urges them to take part in the activity in order to experience the responsibility that goes with having a baby and caring for it.

0659 For the last few minutes of the period, Ric asks them some review questions on facts they have learned in all five human sexuality classes to date.

0771 When the dismissal bell rings, Ric asks students to pile the textbooks they have been using on the table and to put their chairs up on the tables as this is the final class for the day.

0776 Credits.

This tape could be used for coding data on:

- clarity
- questioning
- sharing objective and purpose
- variety

Chapter Six

Summary Chapter

CHAPTER SIX

INTRODUCTION

Chapter Six contains eleven videotapes that can be used for practising your cod skills in a variety of ways. You could use one of the instruments included in the kit one you have developed yourself, or you could practise taking anecdotal notes t collect data while the videotape is running. It is helpful to be able to have an "instant replay" when you are not sure about what happened. Plan to code data with a colleague and compare your opinions and decisions so you have a chance to discuss and resolve coding disagreements.

From the videotaping in each of the eleven classrooms (anywhere from one hour to over three hours), eleven teaching segments averaging 40 minutes (a range of 23 minutes to 59 minutes) were prepared. You will recognize snippets because you have seen some of them as illustrations in the previous four chapters. The basic contents of the eleven tapes are described following the description of the preparation of the tapes.

Preparation of the Videotapes

Previously, this manual had been written to complement a set of 12 videotapes developed by the writer and entitled Evaluation of Teaching: Observation in Classrooms - Project ASK (Administrative Skills and Knowledge). These are still available from the Faculty of Education, the University of Alberta, Edmonton.

On the first of May, 1985 we made a rather sudden, but wise, decision to redo the entire set of tapes. We opted to incorporate a full range of grade levels and three conferencing tapes so there are now 25 videotapes which were produced to dovetail with the chapters in the manual. It was necessary to move quickly and complete the videotaping before the classroom teachers became involved with end of year testing. Provision was made to release the writer from her full time job for two months so she could make the scheduling arrangements, assist in the direction of the taping itself, and supervise the production of the tapes. A lot was accomplished during the two months of the secondment but the bulk of the work was done in the evenings and on weekends over the entire five month period, to the end of September when the tapes were completed.

After identifying eleven classroom teachers who were familiar with the behaviors taught in the Teacher Effectiveness Program, and securing their permission and that of their supervising principal, we visited each classroom site to check on layout and availability of electrical outlets. The teachers were informed of the intent of the project and of our particular needs and they planned to incorporate as many of the required behaviors as possible into their teaching.

The crew of eight (including the writer) spent a frantic but exciting two weeks in May videotaping in the eleven locations in five schools. In every case, the room had to be lighted and many extra cords and plugs had to be connected to outlets down the hall in order to accommodate the power requirements for the audio soundboard, two VTRs, two monitors, two cameras and the boom microphone. On some days we had to relocate hastily over the lunch hour and move all the equipment, sometimes up or down stairs! Without the excellent cooperation of the personnel from the Communications Centre, the Archdiocese of Edmonton, whose equipment we were using, and David Benson, we could not have managed to get this videotaping organized and accomplished during this compressed time frame.

Our eleven teachers assisted us in every possible way. They collected in the parental permission slips from every student who appears in these tapes and advised us concerning events in their lessons so we would be better prepared to capture these on tape. As you can see by the snapshot, we were very much in evidence in the classroom. It is remarkable that these teachers were able to virtually ignore us (as were the students) and continue on with their teaching. We feel these lessons look spontaneous even though the introduction of personnel and equipment did alter the usual classroom environment to a certain extent. Certainly, the professionalism of these teachers is to be admired and appreciated, for without their contribution you would not have any video footage to watch and analyze.

Each teacher wore a remote microphone and we relied completely on the boom microphone (which was held over the students' heads) to pick up student voices. This was preferable to the alternative of 'miking' each student and rehearsing the teacher-student verbal interaction that would occur. We opted for continuity and spontaneity and consequently, at times, we lost quality in the student responses. However, during these intervals, it is possible to follow the general drift of the conversations by listening to the teacher responses.

Two of the three conferences were filmed at the school site, as well as the Power Struggle. The remaining conference plus all of the introductions and explanations were subsequently taped at the archdiocese studio. Then came the long job of sorting through over 86 videotapes and editing the parts together. David Benson and John

Riswold worked diligently and followed my instructions for assembling the footage. The greatest challenges were posed by tapes like 3-1 and 4-1, which we fondly termed the "jigsaws" because so many little parts had to be pieced together in a particular sequence.

The final eleven tapes, included here in Chapter Six, can be used in a variety of ways. The suggestions for data collection topics which appear at the end of each tape are only some of the possible uses.

The end result, I hope, is a resource package that you will find useful as you work through the activities in a group setting. It would be a mistake to watch hour after hour and OD on the tapes. The greatest value in using them will come when they are used as part of the activities planned. The kit is intended to be used as a resource over time, not to be "consumed" over a four day inservice period. The information overload that would result would only discourage and alienate your participants. Thus, the leader of the group must be familiar with both the manual and the 25 videotapes and select from these the portions that can be comfortably assimilated during the inservice time available.

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DESCRIPTION OF CHAPTER SIX VIDEOTAPES:

Tape 6-1 **Peter Harris - Grade 11, Biology**
(60 minutes)

0000 Graphics

0020 Introduction and overview.

0089 Peter hands out some background information sheets and makes sure all students have a copy as they come into the class. "I'd like to go through some background information which may be of value to you when you do your lab write up."

He tells students that later on in the lesson he will explain what the Species Diversity Index (SDI) is and how to calculate it.

163 "I'll go through some things with you and draw your attention to a couple of points. Note, the Saskatchewan River is used for a number of things. Its first water use is for industrial processes. . . One major place used for cooling purposes is the Electric Generating Plant." Peter explains that because the water cools the turbines and then is pumped back into the river, there is never any ice there. A few years ago his Biology class found very little living at that spot on the river bank.

0241 The river is also used for recreation but Peter reminds them it is not safe for swimming. Some sport fishing is done but the fish are not safe to eat.

0276 There is a waste water disposal problem. A 50 kilometer stretch of the river is affected by what we do here in our city. Peter gives them a brief history of water treatment dating back to 1920 and 1930. "Rudimentary treatment of sewage means skimming it - taking out the particles that won't rot . . . plastic, rubber, diapers. . . non bio-degradable." There used to be sewers from houses combined with water from spring run off. If there was a huge storm all this water went directly into the river.

0348 "In 1947 the oil industry hit Alberta . . . started to be centered on the river . . . 1949 population increased. There were no pollution guidelines yet. With the advent of the oil industry the first studies started. . . ."

0390 "D.O. means dissolved oxygen. . . . Coloform count. I'll show you how the count is done. E Coli is the bacterial form found in the large intestine of mammals/man. . . . You take the water sample from the river and use a millipore apparatus hooked to a vacuum tube. . . . Put the sample on a piece of filter paper and draw the water through. . . . If coloforms are present they will feed off the sugar (on the filter paper) and grow and ferment . . . will become visible . . . we can count and use the count to compare 20-160 thousand per 100 ml. This was 1000 thousand per 100 ml. of water . . . drastically over."

493 "BOD. Jot it down. Biological oxygen demand. . . . Do a second sample and compare it to the first. If oxygen is used up by critters in the water . . . there is a demand on oxygen by anything living in it. . . . In 1950's the packing plant wastes used to be put directly in the river. In 1950's they separated the municipal sewage from the waste water run off." He draws a diagram of the cross section of our sewage pipes. "Waste water travels through the upper 2/3 of the pipes. The bottom part carries sewage to the sewage treatment plant." He tells how other industries helped to pollute the river. Now the packing plant wastes are put in big lagoons (holes) and treated before being put in the river.

0612 Peter describes his visit to the sewage treatment plant. . . . "In 1967 Water Quality Criteria was drafted by Alberta. . . . In the late 60's and early 70's there was a big fuss about environmental pollution. . . . Mercury was noted as a problem. Detergents, phosphates and nitrates. . . ."

677 "DDT was banned. Suddenly the level in the river was hundreds and hundreds of times the normal DDT concentration. People had flushed it away. . . . In the 1980's there is an incredible amount of monitoring. . . . It's closer to an acceptable level. . . . The dissolved oxygen count is down at the sample sites . . . we have new problems with PCB's."

719 He asks them to take a few notes in preparation for doing calculations of biological indicators. "Chemical tests alone will not indicate . . . find a way to test for contaminated water. When indicator organisms change in their diversity and number this is an indication that something is happening."

782 "Aquatic organisms may be affected by things in the environment." They list some. . . . "A pathogenic source is a contaminated human."

860 They classify indicator organisms into three categories. "Could you take that list of organisms and put them on a tolerant to intolerant scale?"

980 He shows them how to calculate the Species Diversity Index. . . . "What you have to do for the next lab is to do the calculations for SDI and do a critical analysis of the kinds of things that were going on during our field trip. . . ."

1104 Class is dismissed. Peter chats with some of the students after class.

1112 Credits.

This tape would be suitable for coding the following teacher behaviors:

- warmth
- clarity
- modelling
- directions
- smoothness

Tape 6-2 **Marilyn Nicholas - Grade 11, Math**
(43 minutes)

VHS

0000 Graphics

0022 Overview and Introduction

0077 Marilyn has a double period with this group of students. After the break, students are settling back into class. Marilyn checks to see which questions students may have had trouble with.

0114 "Number sixteen is again very similar to number nine . . . you're picking a bridge hand . . . a committee of thirteen cards - five spades, and eight out of the thirty-nine that are not spades . . . . How often do you get five of one suit? As Brian says, its a very large number that you get when you multiply this out. Most of them basically follow the pattern in number nine.

0162 I want to go on to do an application of this . . . the binomial theorum. . . . It's actually pretty simple. However, in order to lead up to it you're going to have to do a little work . . . do the following questions." (Is there a formula for that?)

0230 "We're developing a formula for it. That's exactly what we're going to do. . . . Once you have written them down I'd like you to look at them for patterns. . . .

0281 Now, first of all I told you that this was going to be called binomial. What is there about this that is binomial?" She asks them to write the powers of the terms for a + b to the fifth, leaving off the numerical coefficients for the moment. "What is significant about the degree of every term?" (They all add up to five).

0332 "Good. So if we were doing a + b to the eighth they would all add up to eight. . . . The best way to write it down in order is to start with your a's in descending order. . . . Even if I said to the twenty-fifth you could do it and you could write them straight down.

365 Now we have to worry about the numerical coefficients. . . . Pascal's triangle. . . . It shows the coefficients." She puts the numbers from Pascal's triangle on the chalkboard.

386 "Do you see the pattern? Could you get the next line? . . . Pretty tricky, isn't it? . . . Now, that's fine for the first few . . . but that wouldn't do you all that much good if you had to write the first five terms of a + b to the twenty-fifth. . . . So we need a formula. We need a pattern and we're going to use combinations to do it. . . .

0427 Now, obviously there are all sorts of different combinations you could have because there are five brackets and there are two different terms you could use out of each one. So that means there are two to the fifth altogether. But what we're looking at then are the ones that have a particular pattern."

0440 She works the method out on the chalkboard. . . .

0490 "Will you give me the first five terms of this one? . . . You don't have to do all twenty-five. . . . That's what makes you sure that it's a combination and not a fraction. . . .

537 Okay, so this should be your first line and then you can work it out.

595 I want you to write a representation of the entire thing so you know how to do that with three dots in the middle. Make sure you have enough terms so that the average person could know what the pattern is.

633 Take a good look at it because that is the sophisticated way to write it and also the faster way to write it.

653 Now, we have done it for the purposes of developing a formula using a simple binomial, a + b, but now that we have a pattern we should be able to do exactly the same thing for other binomials . . . . Let's see how you can do with some others. I want the first five terms." She watches them work and then does examples on the chalkboard for them.

730 She assigns another question and monitors them as they work on it. She solves it at the chalkboard for them.

789 "Okay, let's see what other kinds of goodies they're apt to throw at you in here. . . . On page 352 they start with a + b to the zero. . . . When they get over to page 356 they've done a few that are like the ones we have here; but I'd like to try a couple that are just a bit different, that might give you some problems and so we can do them, perhaps, here together and come across problems while you've got someone to help you. . . .

835 Obviously, the complication here is exponents. You're going to have to keep your head about you to make them right." Students begin working at these questions. Marilyn provides assistance as she monitors their progress.

902 Credits.

The following teaching skills could be coded from this tape:

- withitness
- low key responses
- clarity
- modelling
- sharing objective and purpose
- momentum.

Tape 6-3 **Faye Kay - Grade 1, Language Arts**
(Lesson approximately 51 minutes)

VHS

0000 Graphics.

0019 Introduction and overview.

0071 As the children come in the classroom first thing Tuesday morning after a long weekend, they hang up their coats and settle into their desks. Faye does not conduct opening exercises. The students simply start to work. They know the routine and first begin reading their new story to themselves or to a friend. Next they write in their diaries. They are working in various locations in the classrooms. For example, two students are in the cloakroom area reading together. Faye circulates and helps students pronounce words, or spell words they need to use in their writing. "Chantal, where's your book, love? Good, okay. . . . Can I help you? Let's do the whole thing." She reads with them, "Rata-tata-thump-clang."

0250 Faye moves on to other children. "Did it make a rhythm when she was doing it? Like the drums? . . . It's just Claire. If it had an A at the end it would be Clara. It's a silent E. Good reading, good expression."

0296 To another: "Remember we had that book called *Laughing Ladders*? That's got a different ending - same root word - laugh, laughed. . . . What did she want her friend to watch? Right on! What did she play on? - first, when her friend came over?" (on a tree). "What kind of a noise was she making? Can you say that like she would be doing it and banging a tree? Rata-tata-thump-clang. Pretend you've got a stick. Let's do it. Rata-tata-oompah. I like to say things like that.

0345 . . .What happened in the end? What did he get sticky from? Do a big long diary of what you did over the weekend. Did you see cows? What were the calves doing?" (I got a ride on one.) "Was he gentle? I hope you're going to write about that in your diary."

0375 (I have a sunburn) "Oh dear. Let's see. Yes. Your back feels warm. Take off your sweater if you like, honey." (. . . about movies.) "I'd rather know about what you *did* over the weekend." (I watched T.V.) "Come on, you must have done other things. Did you go outside, play soccer, go on a picnic? Tell me. I'd like to know about the picnic.

0409 . . . Just read part of the book Adam - not a whole one in a morning. That's a book that's good for a week. . . . I can't believe that. The guy who writes the longest stories in the world? You can't think?

What did you do over the weekend? Did your cousins come over? What did you do with your cousins? Then if that was the fun thing, go ahead and write about it. Don't forget the date.

0451 . . . Did Mom and Dad go to Toronto? Not yet? When are they going? Who is going to look after you? . . . Remember, if you need extra hugs you know where to go."

0486 Students continue writing in their diaries and reading the assigned story aloud. Faye continues to supervise the work and help new students. After a time she tells a student, "I'm going to call people to centre right away."

0702 She gives a signal and says, "Boys and girls please bring Leap Frog and come to centre." She sits on a chair and the students come to sit on the floor - she spends the first few minutes asking comprehension questions about the story . . . . "What did Lisa do when she saw Vicky playing her drums? That's right. She got very upset and angry. Who did she go to? . . . Do we know other ways to solve problems without going and tattle-taling?

0762 Let's find the part in red on page 54, at the bottom, and let's do a little practising there. That's when Vicky hit the sticks against the tree. How did she feel?" (upset) "Do you think she just tapped the stick gently? No? Smash? Okay, so let's get that smash." They read together: "Rata-ta ta-thump-clang . . . ."

0837 "Tell me, how did the story end? Who can remember? You can look if you like. . . . So they got to do what they wanted to do without bothering anybody else.

0846 Close your books and put them beside you. I wanted to read you another story about a little boy. I want you to think about Sam and think about Vicky at the same time and see if you can decide if they had a similar problem." She points out the name of the author and the illustrator and they admire the pictures before she begins to read to them.

0941 After finishing the story she asks, "Tell me, have you ever had a time when you wanted to play with someone, or do something, and they said 'no'? Can you share a time with me?" Faye stimulates discussion about such a situation and the feelings the students experienced. For their next assignment they are to write about a time when someone said 'no' and then tell what they did to solve their problem. Also, they are to draw a picture to go with this story. The tape ends as they go back to their desks to begin this assignment.

1060 Credits.

This videotape would be very suitable for coding data on the following behaviors:

- verbal interaction (questioning)
- praise
- monitoring (academic feedback)
- empathy and warmth.
- standard signal
- transitions

Tape 6-4 **Jim Johnson - Grade 5/6, Language Arts**
(lesson approximately 44 minutes)

VHS

0000 Graphics.

0017 Introduction and overview of the lesson.

0083 Students sit in a circle on the floor at the front of the classroom. "Thank you for being so quiet coming in." In "Talk Time" today, their discussion will combine the two topics of problem solving and peer pressure. Jim has prepared a scenario sheet for each student. As a group they will read the description, identify the problem, and figure out how one might solve the problem.

0132 First they define what peer pressure is and they acknowledge that in some cases peer pressure can exert a good influence.

0194 Then they review the steps one should use when solving a problem. After they discuss these, Jim summarizes the steps:

(1) understand what the problem is,
(2) decide what to do,
(3) do it, and
(4) check to see if/how the solution worked.

0253 The first problem they discuss is what to do when you are lost in the city riding your bike. The second problem involves a window which has been broken by a baseball. The third is about one student teasing another. They end the lesson by discussing how to handle a situation where a friend might be pressuring you to shoplift. They review the steps in problem solving one last time. Jim points out that this same process for solving problems can be used to solve math problems, computer problems, or every day life problems.

0444 Jim asks students to return to their seats. As students settle, Jim distributes information sheets to each row and asks students to have their composition notebooks out.

0482 He begins the new lesson on composing a mystery story by reminding students of the other kinds of stories they have written. They discuss the distinguishing features of a mystery story by consulting the information on the sheets. "What three things does a good mystery story have?" They consider each of the elements of a mystery story and give examples of what these might be.

0555 The teacher writes three words ("character", "setting", and "suspense") on the chalkboard. "With these three things in mind, let's build a mystery story." As a group they will begin to develop a plot for a mystery story.

0571 The teacher demonstrates how to plan this by noting down ideas on the board. First they choose a name (Cornelius), a setting (a haunted lighthouse), and then they begin to sketch out how the story might unfold. Jim reminds them that it is important to get their ideas down quickly during this planning phase. "Your assignment is to write a mystery story of any kind. Webbing has to be handed in with your final copy."

0678 As students work on the task, Jim circulates to supervise their work and to provide assistance. Students check out their plans with him and read him parts they have composed. He questions them about the structure of their story and how it will end.

The tape ends as the students go outdoors for their mid-afternoon recess break.

0944 Credits.

This tape could be used for coding data on:

- lesson design analysis (modelling)
- questioning
- respect and understanding
- monitoring
- variety

Tape 6-5	**Ted Thresher - Grade 12, Math** (lesson approximately 58 minutes)
VHS	
0000	Graphics.
0020	Introduction and overview.
0061	Ted reads a few announcements to the class before beginning instruction.
0116	He hands back a quiz and indicates that students have done less well than he expected. He encourages them to come and see him if they are having problems with the work.

0162	He takes a few minutes to review quadratic equations before moving on to complex numbers. He suggests that they follow seven steps in solving the equations. . . . "What do I have to add, Crystal? . . . Multiply this out: 10x plus 25, subtract negative 16. . . . So it's important. You have to know how to do this." He draws a graph on the chalkboard. "Here's the vertex . . . . Where does it cross the Y axis? . . . You can either factor or use the quadratic formula.
0250	. . .Ninety-five percent of the time they'll give you one that is factorable . . . range and domain . . . . Suzanne, what comes first? . . . you have to know how. This has been on the exam since 1973. It's the most important part of Math 33. . . . So much for the review."

0279 This is the eighth day (of twelve) that the class has been working on complex numbers. He reviews what they did last day. "If I wanted to add . . . non i and get another complex number, Stacey. What will it be? . . . Let's subtract these two. Tony. Positive three minus positive five is negative two. Again, the closure property exists."

0336 "Here we use the formula . . . four mini products. . . . Ron, 30i, 3 + 7 + 30 and, lastly, 3i + 5i. 'I' squared is minus one . . . when I had the situation of six over the square root of seven . . . remember the process called rationalization. You multiply the top and bottom by the square root of seven. . . . Let's see if we can transfer this to new material.

0424 We did an exercise last Thursday. . . . In every case it turned out to be a positive number . . . 49-25i squared; but i squared is minus one. Eventually, it will become a positive number. I had asked you to do four questions. Let's take a look at Set E, 1, 2, 3 and 4. . . any that you want me to do? . . . I assume you can handle complex numbers - one step at a time. Grant, start the procedure rolling. . . . Ron, negative one, so I have that one. . . . Convention dictates that I write the sign first . . . negative . . . then the numbers . . . negative i squared. . . . We'll clean that up in a minute . . . . This is where we started, over here . . . multiply 9, negative 3i, should be negative 5i." He asks if students would like him to do another one on the chalkboard. He demonstrates how to do the next one.

0566 "Today, new material. Take a note or two. We have two more things to do - solve equations using complex numbers and the last thing is to graph them. So our objective is to solve equations involving complex numbers. This is not a very difficult procedure. I'll try to go back to something you've done before and explain it in terms of something you've already done. First of all, a + b is the standard form of a complex number . . . Imagine if I had another c + bi . . . to know about a + c . . . the b portion has to be equal to d. That's the theory behind the whole business.

0599 The two complex numbers are equal. The component parts are equal . . . . Isolate the parts. So take the a + c portion . . . y is 6. . . . That's as easy as it is. Nothing difficult. Now we'll make them a little more complex. Turn to number one on the sheet." They look at number one together. "If you look at this keep in mind the system . . . so if I just equate the two parts that are the same. . . . Could I divide both sides by i? . . . I'm left with. . . . That's all there is to it.

0664 Let's look at number two. . . . I'll show you a formal procedure then I'll let you do one to six. I'll do number two.

0700 Let's do number three as a group. . . . Set these equal to zero. . . ." Students work on their own. Ted circulates to see how they are doing. "It's really hard to do these things on the back of a postage stamp. Don't be afraid to give yourself some room and take your time." He checks another student.

0817	"Do you want to stop what you're doing and we'll come back and take another run at it?" Teacher goes to the chalkboard to explain how to do another question. Then the students work independently again. Ted circulates to provide assistance. "Okay, Grant. Okay, where are we? You know what you've done? You have half of this question and half of that question!. . . You just have to take the non i portions . . . and take the other portions . . . get two equations which you have to solve. I don't know if that helps.
0889	. . .For homework I'd like you to do question C. Just do the first column please, numbers 1, 3, 5 and 7." He checks on students and helps them. He decides to show all students how to do a particular question.
0942	"Can you stop what you're doing and look up here? I'll go through one example just to show you how it works. Once again, I have to focus on the non i portions and let's group them together. . . . Secondly, I take a look at all the i components here, here, and here.
0956	. . . That's not too hard." (Phone interruption.) You set the non i portions equal to each other and you set the i portions equal to each other. I keep repeating the same thing. After you've done that, your success in the question depends on your ability to solve the equation." Teacher resumes giving individual help to students.
1027	To the whole group - "Okay, there's ten more minutes. I'd like you to get a good start on this. I realize there is a very important hockey game tonight . . . ." He helps students individually.
1139	Credits.

You could collect data on the following teaching behaviors from this videotape:

- clarity
- modelling
- guided practice
- monitoring and adjusting
- verbal interaction.

Tape 6-6 **Denise Tremblay - Grade 10, French**
(lesson approximately 52 minutes)

VHS

0000 Graphics.

0020 Introduction and overview.

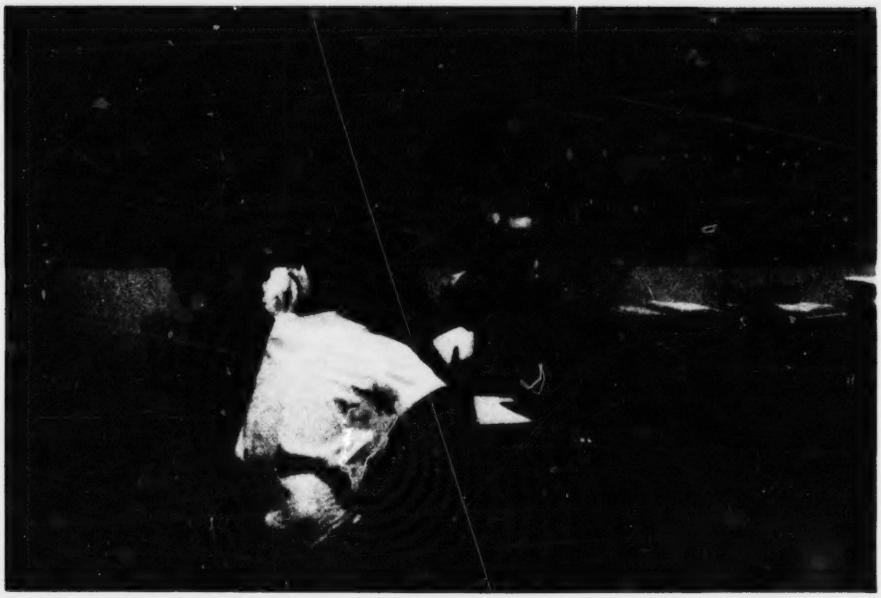
0082 Denise checks on attendance before beginning her class. She hands in the attendance sheet and then says, "Bon, on peut commencer. . . . Aujourd'hui, nous allons réviser le passé composé." Before they can use the passé composé, they must know how to conjugate both the verbs être and avoir. Denise assigns them to teams of three people to play a drill game. She places cards along the chalkboard ledge and Colin writes a number above each card.

0182 Each team gets a chance to identify two cards which together form a part of the conjugation such as "vous avez" or "ils sont." After each guess the cards are turned over again and students must remember where the words are in order to select a winning pair. . . . "Équipe numéro trois. C'est trois, Celena? Oui. Trois et sept. Ça va? Non. Ça ne va pas. Colin, ton équipe. Numéro dix - neuf et sept. Ça va? Non. Ça ne va pas. Et qui maintenant? Vingt et un et sept. Ça va. Oui. Ici ça va. "Tu es." C'est le verbe être. Et ça c'est l'équipe de Sue." She marks the point on the board for Sue's team.

0337 The teams continue taking turns until all the cards have been paired up and removed. "Qui a gagné? Vous avez gagné." She points to the team names on the board. "Première équipe, deuxième équipe, l'équipe de David et l'équipe de Roger troisième équipe. C'est trés bien. Alors, pour faire le passé composé on doit savoir les deux verbes - le verbe être et le verbe avoir."

0424 She uses the chalkboard to show that the verb parts they have been reviewing, plus a past participle, together form the passé composé. To form the past participle one must change the "er" verb ending to "é", the "ir" verb ending to "i", and the "re" verb ending to "u". She points out that some verbs go with avoir and others go with être.

"Alors, maintenant je vous donne les enveloppes. Vous devez prendre un papier. Vous pouvez travailler en équipe de trois personnes. Il y a sept enveloppes. Vous en avez sept." She hands out two sets of seven envelopes. Each team must work through the exercise contained in each of the seven envelopes. She has made two sets to facilitate the availability of the envelopes. As a team they must arrange the bits of paper containing words into both a question and an answer and write this down on a paper. "Il y a des pronoms ici. Dans la question il y a des noms et dans la réponse il y a des pronoms."



0492 "Il faut en faire sept enveloppes maintenant - Écris la phrase et la question." She asks them to number each question and answer set that they write. The students have some difficulty understanding that they must write seven sets and that there is also a duplicate set of seven envelopes but eventually all is clear and they busily work and trade envelopes with other teams. Denise circulates to help students arrange the word pieces into question and answer sentences. "Ça va - avec avoir ici. Alors, 'des disques' c'est remplacé ici par 'en.' Ça va. 'Les enfants' c'est ça - nom. Il - ne - lui - en.

0637 . . . Où est le complément là? C'est ça. Pourquoi? C'est ça. Avec les - ici le complément. Est parfait. C'est ça. . . . Très bien. Vous avez fini sept enveloppes?" Denise continues to circulate and assist and to transfer the envelopes from group to group. "Qui n'a pas fait numéro trois? Qui veut numéro trois? Qui veut le numéro sept? Trois aussi?

0810 Allez écrire vos réponses au tableau - Vraiment bien sûr - oui. Allez, allez. Est - ce que vous avez prèsque fini?" Students go to the board to write their answers so the whole class can correct their work together.

0879 Once the sentences are all on the chalkboard Denise asks students to examine them and determine whether they are correct. "Regardez au tableau si les réponses sont bonnes - pour corriger les réponses. . . . Vous pouvez arrêter maintenant si vous n'avez pas fini." Finished or not they are to stop and correct the boardwork with her. She explains why she is making any corrections. "Lui - c'est un pronom qui va remplacer 'au professeur.' Très bien. Est - ce qu'il a voulu de la crème dans son cafe? Non, il n'en a pas voulu. . . . Pourquoi en? De - la - crème. Très bien. . . . Des questions? On va faire un exercice ensemble oralment."

0932 Next she does an oral exercise with them. She gives them a sentence in the present tense and they must put it in the past tense, replacing the noun with a pronoun. "Pierre étudie le français. . . . Il l'a étudié. . . . Monique donne les livres au professeur. . . . Monique les lui a donné. Paul veut deux stylos. . . . Il en a voulu deux." While they answer these questions orally, Denise coaches them with their pronunciation and often asks them to repeat the whole sentence to get it right.

1014 "Ça ici c'est un exercice écrit - vous allez écrire et vous allez finir pour devoir." She hands out an exercise sheet which may be finished for homework. She assures them it is an exercise, not a test. Students begin working and Denise circulates providing help to students. "Nous sommes allés avec un 's' parce que aller c'est avec être. C'est le complément du sujet." The tape ends as she continues to provide guided practice to students as they work.

1078 Credits

The following skill areas would make suitable topics for data gathering in this lesson:

- sustaining responses
- praise
- lesson design (guided practice)
- monitoring
- clarity

Tape 6 -7 **Ric Rosborough - Grade 8, Science**
(lesson approximately 30 minutes)

VHS

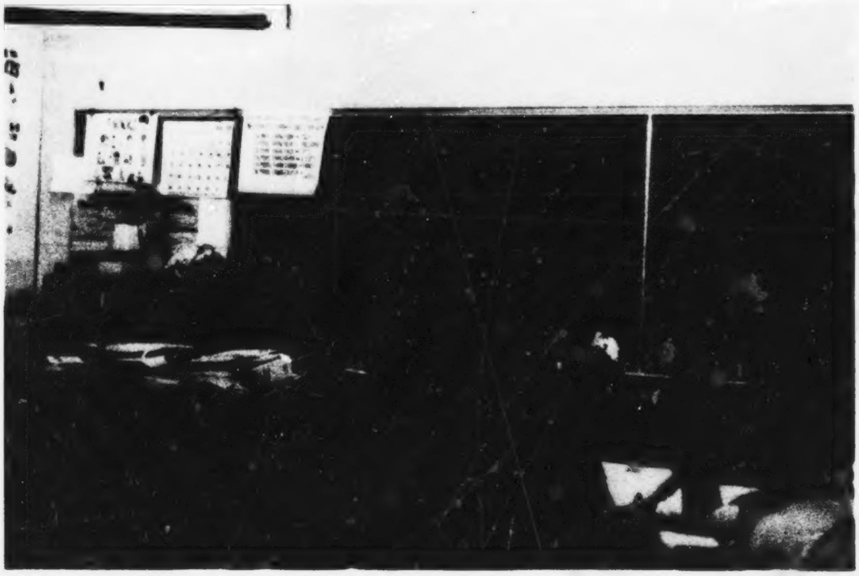
0000 Graphics.

0019 Introduction and overview.

0056 As the class begins Ric tells them the agenda is a quick quiz, working from the book on page 6, and understanding that a test is coming up in the next four or five classes. He reminds them that by now they should have started to review for the final exam which is worth 25% of their year's mark. The test he will hand back to them today is multiple choice and many of the same questions will appear on the final (215 multiple choice questions).

0106 He asks them to participate in a quick review. "What are the three methods of mountain building? How does an uplifted mountain get created, Wade? (Two plates are pushed together.) What pushes them together, Manual? . . . Perfect! What is the earth's surface called? The outside layer, Mark? . . . starts with an L . . . . What causes an uplifted mountain then, Mark?

0164 Those of you who have trouble or don't know the answers, write down the questions. Get a piece of paper, quickly . . . . What about sediment? What is sediment? . . . Where did the river get it?" (It erodes from the bank or the friction makes it come out into the water and then it flows somewhere else.) It settles to the bottom when the river stops moving fast.



0204 If the sediment gets pressurized it could turn into sedimentary rock. "What is a 'tsunamis'?" (A wave in the ocean.) "Caused by what?" (An earthquake underneath.) "Or two other possibilities, Daniel?

0225 Seismograph - What does it measure? Christie, do you remember? No? Seismograph. Think of it making a graph. Seismology measures - Kendra?" (Earthquake) "It measures the intensity of an earthquake. What does it look like? It's got a spring and a weight and a pen and paper tube to draw on.

0237 Richter scale, Charlene?" (Don't know). "What do you think, Chris?" (Measures earthquakes.) "Measures what about earthquakes?" (How powerful it was). "Why does an earthquake happen, Jeff? Give me a five point answer worth five marks.

0270 Okay, now magnotometer - where's someone who knows? Leane? How does it measure for the earthquake? . . . Rocks with iron in them give off a different signal when they're under pressure than when they're not . . . . So they can measure the change in the rock's magnetism with a magnotometer . . . . They'll know whether it will be a big eruption or a small eruption.

0302 What's a tiltmeter?" He draws a diagram on the chalkboard. "So that's one way they know a volcano is ready to erupt, using that tiltmeter. What does a volcanologist do? . . . Which one makes the bigger eruption, thick or thin? . . . Chris, you weren't listening." Another student answers. Ric walks over to Chris, smiles and says, "Right?"

0362 "What is the hot spot theory? Give a full statement of how the hot spot theory works, in proper English if possible." (Mark does.) "Not bad. Can you improve, Leane? . . . Okay, because of the earth's shifting . . . . One of them is Hawaii.

0389 What is pangaea?" (A theory about all the continents being joined together.) "Exactly! What is one of the proofs?" (Fossils.) "What else, Mark?" (All the continents fit together like a jig saw puzzle.) "That's two - one more, Wade. . . . We need two more Kendra. . . .

0442 What are the four layers in the earth's crust? Layer A, B, C, and D." He draws a diagram on the chalkboard and asks for the name of each layer.

0466 "Distinguish between a young and old river in its shape, Cheryl." (A young river is -um- less.) "Okay, let me give you a hint." He draws on the chalkboard. "Which one is young? . . . How do you know? . . . What is the speed of a young river? . . .

0510 What's an Oxbow Lake? . . . So the river is cut off and left on its own because of the sediment getting in the way. . . . What is the process that allows a river to go through rock?

0558	What is a delta? . . . So what does it do, create land or take it away?" (Creates new land.) "It's a fan shape of land formed at the mouth of the river.
0593	Waterfall . . . Why is this moving back to here?" He draws a diagram on the chalkboard to help explain it. . . . "The rock wears off down here . . . this chips off . . . there's a backwash down here . . . . The bottom line is, nothing is permanent. The land we're living on seems fairly stable but it's moving. Someday it will be subducted underneath, or be pushed up into a mountain, or we may have an ice age over top of it."
0670	The tape ends as Ric reviews eleven ways that the earth is eroded.
0687	Credits.

This tape could be used in particular code data on:

- questioning (verbal interaction)
- clarity (modelling)
- momentum
- awareness
- sharing objective and purpose
- guided practice.
- sustaining responses.

Tape 6-8	**Ron Wigglesworth - Grade 7, Art** (lesson approximately 40 minutes)

VHS

0000 Graphics.

0020 Introduction and overview.

0068 Bell rings. Teacher waits. "Good morning to all of you." P. A. announcement. He moves a couple of students so they will have a better vantage point.

0130 Ron emphasizes how important the skill of observation is to the artist who must be able to picture an object in order to be able to draw it. He plans to test their powers of observation during the class and has planned several exercises which will do this.

0170 First, they are to recall details about a three dimensional object at the back of the room, and next about an art print which is hanging on the back wall. Then Ron quizzes them for details about a print which had been on the wall for some time. After each set of answers he allows students to see the item they have been recalling.

0297 For the next exercise (to sharpen their powers of observation) students will be shown an art print for only a few seconds and they must recall details about it. Ron shows the first two prints (circles, a bouquet of flowers) and after the students have provided a description of what they saw he shows them the print again, to confirm their description.

0443 He provides background information about the surrealistic prints they will work with next. He shows them some examples from a book and points out the distinguishing characteristics of Magritte's paintings. He directs them to observe what is weird in the next prints he will show. Again, he gives them an instantaneous flash view of the print and he questions them so they can recall details about what they have observed.

0573 Without warning his students, Ron has planned a surprise visit by two "beings." One is dressed as a lion and the other costume defies description. Suddenly, on cue, the front door of the classroom opens and the two costumed "beings" run down to the back of the room, turning and making noises. They exit very quickly.

0582 The students are taken by surprise and are just beginning to comprehend that this was a planned part of the lesson when Ron begins giving them instructions about drawing what they have observed. He hands out drawing paper and asks them not to consult with each other but to rely on their own memory to recall the details and to sketch the two "beings" on paper.

0630 As students settle into the task, Ron circulates to provide encouragement and guidance as they work. Just before the period is over, he asks students to put their names on their drawings and he asks one student from each table to collect the drawings and hand them in. They will finish working on these next day. As the class ends, he asks students whether they feel their powers of observation have improved as a result of these exercises.

0875 Credits

This tape is particularly suitable for coding data on:

- lesson design analysis
- verbal interaction
- clarity
- monitoring seatwork
- smoothness
- variety.

Tape 6 - 9	**Merv Tuplin - Grade 7, Mathematics** (lesson approximately 23 minutes)
VHS	
0000	Graphics.
0020	Introduction and overview.
0056	Merv is writing a question on the board during change of classes. The bell rings. Students come in quietly and sit down. Merv finishes writing the question. He stands at the front of the class, counting out slips of paper for each row. "Alright, during this period we are going to have our quiz. Then we're going to spend some time reviewing conditions using addition, subtraction, multiplication and division. You'll have a chance to practise those during this period and we'll try and correct that within the period as well."
0156	Teacher distributes the papers and waits. He gives the first question. "What property allows us to change the order of the number when adding or multiplying?" (Liz Harrison has come in to observe him and he nods "hello" to her as he walks down the aisle.) After the fifth and last question he says, "Would you hand them in please, and open up your exercise books and be ready to start." Students shuffle papers and get ready.
0249	Teacher waits to begin - "Alright, let's just review the quiz." He asks each question again and asks students to give the answer orally. He indicates whether the answer is correct. He will mark the quizzes later and return them to the students. "How many think they got five out of five? . . . How many have four?

0316	Now we have some questions to correct. Let's just take a minute and correct the exercise from last day then. Number nine is where we left off. Come on boys, we're waiting here.
0339	Students take turns providing the answers to these questions. "How many had four correct this morning? . . . If you had any of these wrong, let's get them corrected and if you have any trouble correcting them make sure you see me about getting them corrected.
0350	Alright, put your pens and pencils down please, all of you. I want to spend some time right now reviewing some of the problems that can occur when you're solving conditions." He asks them to read the question on the board and give him the expression that would go with that. Wes gives him an answer and he writes it on the chalkboard. "Let's see if we could use another operation to solve the same thing." Another students provides one. "Both of these are correct . . . . Now I want to go through the steps again today to solve this problem.
0403	The first thing to remember is this business of the teeter totter. Whenever you're going to solve a condition, keep that in mind all the time. . . . We want to get all the unknown numbers on one side of the teeter totter and the known on the other side and yet keep everything balanced.
0431	This side is going to be divided by 110 and this side is going to be divided by 110 because you don't want the teeter totter unbalanced." . . . The solution is 8. Next he structures the question mathematically and writes it on the chalkboard. He explains all the steps and asks questions about these. He points out that they can reverse multiplication and division and also addition and subtraction. "If you run into trouble, draw a diagram with the teeter totter. Keep it balanced all the way through. . . .
0503	Right now, I'm going to give you some exercises to do in your exercise book. I want you to work on them during this period." He distributes question sheets to students. They begin working. Merv monitors students to make sure they can get started on the task. The tape ends as students continue to work on the exercises.
0572	Credits.

Based on this lesson, Liz prepares the C conference she conducts with Merv in Tape 1-4.

This lesson could be used to observe and code these teaching behaviors:

- sharing objective and purpose
- active participation
- questioning
- transitions
- modelling

Tape 6-10 **Heather Lynn -Grade 2/3, Mathematics**
(50 minutes)

VHS

0000 Graphics.

0008 Introduction and overview.

0054 After morning recess, Heather waits for her class to settle in. She waits for student attention. "Okay, eyes here. Could we have all feet on the floor . . . empty fingers." She makes a gesture (zips mouth shut) then asks both grade two's and three's to listen to directions. Grade three's will work on page 228 in their arithmetic book so they will need their books and scribblers. (Notice Liz in the background taking anecdotal notes while observing Heather's lesson.) She will hand a worksheet on clocks to the grade two's.

0124 "So the only things you need on your desk now grade two's are pencils and erasers. . . . First thing to do is put your name on.

0154 Don't do anything yet." She checks with the grade three's and assigns questions one to nineteen, in three digit addition. At some point she will take them to the back table to work on a clock sheet too. Returning to the grade two's she goes over the two hands on the clock. . . . "Which hand tells the minutes? . . .The long hand tells us how many minutes.

0186 What does the short hand tell us, Amanda? . . . If the big hand is at twelve and the little hand is at eight, what time would that be? . . . Anytime the big hand is at twelve it's an o'clock. Philip, are you ready to go to work? . . . Your job is to look at the time underneath each clock and put on the hands. Make one hand shorter . . . fifteen minutes after. How do we count, Lonnie? Five, ten, fifteen. . . . Good, that's 10:15."

0241 Heather goes to the grade three's. "With these three digit numbers you can't write sideways and add. . . . Show me what you need to work on - which page, Bryce?" (I forgot.) "What number would we usually start with?

0286 Grade two's, especially watch your half past times - the thirty times - half way between the two numbers. Good, I like that. That's a good job (to a grade 3 student). . . . As long as you've got the nine in the ones row - that's good - just don't put it over into the tens or hundreds.

0326 . . . What I'd like you to do Cedric is to hand out a number sheet, the long white sheet on my desk. . . . Going across it's not easy to add. That's why you should do it down . . . . When finished with the time sheets grade two, they go on the filing cabinet.

0377 . . . Jason . . . 7:45 - between the seven and the eight. Now forty-five. Let's count around from the twelve. Can you make the change? Aida, you let Jason do his own, okay? Jason don't bother Aida with questions. If you have a question put up your hand and ask me. . . . Always put down the number in the ones row, under the ones column. . . . We always carry the tens number up to the tens row.

0430 . . . Boys and girls in grade two, don't forget your second page on your clocks. . . . Count from the twelve by fives; five, ten, fifteen. . . . Caleb, how far are you now? Not far enough. Please attend to business. . . .

0531 We're getting to be such good adders that I can give you some thousands questions too. . . . We have to count from the twelve around the clock till we get to fifty. Can you show me where the big hand would be? At the ten? Right. . . . How far are you Bryce? Four? Good. Keep going - lots more to do.

0550 I'd like to have the grade three's come to the back table . . . give them a test on clock time too. . . . If grade two's are stuck on a question leave it and do another.

0576 . . .You need pencils and erasers at the back table. (Helps Bryce get to the back table, and she moves Amanda to a different spot to work). Put your name on the booklet. . . . I'm going to tell you the time and you're going to put it in.

0608 . . . Ready for first clock - 2:40. . . . Oh, Chris, I'll be right with you. I just have to give grade three's one more number. This one's a little harder; 11:17. I'll be right back."

0653 (Charlie and another student have just returned from resource room and need to be given directions about the clock sheet.) She returns to grade three's; "3:28."

0712 (She helps Bryce sit closer to the table so he is able to make neater numbers. She watches Mandy while she works with the grade three's and reminds her that there is lots of work to be finished.). . . "The last one on this page - 6:26. . . . One more page and then I'll let you go back to your seats -

0815 4:14." After dismissing grade three's, she asks some students who have not finished working to come to the back table to work there. "You don't need help.

0841 You weren't working and I thought perhaps you were stuck on something. Go to your seat then. . . . Okay, Mandy, how far along are you? . . . Let's get thinking." Cedric is finished and is waiting for someone to play the game Time Bingo with him, at the front.

0908 Teacher checks on other students who are finishing work and then gives more directions to students playing the game. The teacher monitors more seatwork.

0934 "Doing well. Good job. . . . Lonnie, see if you can get this row finished up." Teacher goes to students at the back table to settle a disruption. She returns to the front to remind players about the rules of the Time Bingo game.

1006 Credits.

Based on this lesson, Liz conducts a B conference with Heather in Tape 1-3.

Heather displays skills from the following areas, which could be coded from this tape:

- overlappingness
- awareness
- low key responses
- smoothness
- monitoring
- transitions
- empathy

Tape 6-11	**Helen Mills -Grade One, Language Arts** (lesson approximately 46 minutes)
VHS	
0000	Graphics.
0020	Introduction and overview.
0059	Helen has assembled her grade one class over to the side of the room where they recite an Emily Dickinson poem they have learned. The teacher has covered up some of the words and she wants the students to substitute words, thereby changing the poem. (The original poem says "a bird came down the path.") "Let's try one together." They decide to pick a kangaroo. They discuss details about where it might live and what it might eat because they need information about this for the poem.
0190	The original poem has two verses. They model the new version of the poem about the kangaroo to the end of the first verse. "For most of you, you'll probably stop there. . . . If you are doing half, pick the short sheet." Those who wish may write both verses. She asks them to choose a long or short sheet depending on the choice they make. They line up to select which size sheet they need. Then they go back to their desks and begin the task.

0245 The teacher circulates to help the children as they work along. "A chicken came down the grass. . . . What's this? We'll be able to work on this for about another five minutes. If somebody's finished their first one and would like to try a second, then they could pick the best they'd like to share with us.

0274 Tara - that kind of hay. You're welcome. Look's good. So you either practise reading that one or start another one and pick your best. . . . If you'd like you could make it different from the camel. Yes, Otis?" ("Can you spell the tiger eats fish?") "Well, it could eat meat. I'm wondering how it could fit with this poem. Could I see what these three people would like then I'll come and see if I can help you." She helps Melanie figure out what a bear might eat. "Do you need some help with the spelling? . . . b-e-r-r-y."

0317 To Otis, "Okay, let's go have a look. . . . A tiger came down the walk. . . .How do you spell down? Not bown." They laugh. The teacher gives quick assistance to other students as she crouches beside Otis' desk. She prints words they need, on small pieces of paper.

0363 "We will be sharing them together in a while so you might want to practise it. If you want to illustrate it or try a second one, maybe a shorter one, that would be fine too. . . . How are we doing, Adam? Need some help?

0392 That's your second one. Wow! Okay. I guess you'll have a decision to make then as well - which one you'd like best to share with us." To Otis, "Yes, he's written two poems. Let's see if we can finish our first one. A tiger came down the walk. . . . Now what would it bite in half? . . . Fish in half? That might be something we could check in the library." They decide on the word rabbit. . . . "He bit a rabbit in half, and ate the fellow raw."

The teacher continues to help other children while she remains near Otis. She gets Otis to practise reading it aloud to her now that he is finished. "Patrick, that looks really neat. Would you be willing to share it with us? . . . Boys and girls we'll work about one more minute."

0640 After a minute she calls for attention. "Is there anybody who does not have their first copy of a poem ready? . . . Would the people who are not finished a poem please come up here to the front to see me and I'll see if I can help you." She asks the others to pick their best poem. She pairs them up and the partners are to read their poems to each other. They can choose a place in the room to sit and share.

0690 Otis decides he does not like the partner he has been assigned. The teacher makes an alternate arrangement for him. She works with the students who have not yet finished their poem. . . . The teacher announces that there will be one more minute for sharing the poems.

0798	She asks the children to join her over at the side of the room, in two lines, and to have a number fact ready. "I'll give the first number fact. If you get the number fact correct, you give the next one." After the second time they go through the line and answer the math question, students are to return to their seats and print as many words as they can that rhyme with "ride."
0864	Otis leaves the line without taking his second turn. Later he creates a minor disturbance and the teacher reminds him that he is disturbing those still involved in the activity.
0904	Their "ticket out the door" for their morning recess break will be at least one rhyming word. She circulates to check in scribblers and dismisses each student once he has performed the task.
0976	Credits.

This tape could be used to observe and code the following teaching behaviors:

- verbal interaction (questioning)
- variety
- low key responses to misbehavior
- selection of students
- monitoring
- direction - giving
- rules and routines

TEST TAPE
Tape 1-2 (Accession Number)

Find the notes you made, or the "report" you developed, after watching the Chapter One Test Tape, 1-2 (Accession Number). Before you read the notes over, watch the test tape again. Reflect on what you have seen and prepare a second "report". Compare both reports and note any differences in emphases or in the comments you have made about the teaching segment.

RECOMMENDATIONS

Read More

Those of you who have diligently read your way through the manual and watched the videotapes, are to be commended for your considerable effort. Please treat this information as a "first step" only and plan to read more material such as the Good and Brophy books (see page 4-5) and the various publications by Madeline Hunter (available through Theory Into Practice (TIP) Publications, P. O. Box 514, El Segundo, California, 90245).

Two books by Carol Cummings, Managing to Teach and Teaching makes a Difference are published by TEACHING, 331 - 8th Avenue South, Edmonds, Washington, 98020 and are well worth reading. Much of the Teaching Effectiveness Program curriculum is derived from the above sources.

The writer of this manual is employed as an Evaluation Consultant with Edmonton Public Schools and, thus, is only a phone call away (429-8000) if additional suggestions for resources are required or if clarification is needed.

Attend Workshops

Many inservice and workshop experiences are presented by the A.T.A., ASTA, and educational associations. Avail yourself of these opportunities to acquire more information or to get another presenter's perspective about the evaluation of teaching.

Be Flexible

As indicated many times in the manual, the procedures and instruments you elect to use must reflect your own context and situation. Please do not use instruments which do not suit your own circumstances. Please do be eclectic and use what does seem to suit. Be inventive enough to design procedures and data collecting instruments which are as descriptive and factual as possible and which allow you to gather data for making evaluation decisions.

Work With Others

Perhaps the best way to internalize material and to develop coding skills is to work with a group of colleagues who are similarly committed to upgrading their data collecting techniques. Much can be learned about yourself in the process, and this is very important. By acknowledging your preferences and biases you can reduce their influence on your ability to perceive accurately. Through discussions with others a common set of understandings may be reached.

Be Positive

Expectations about how well students will perform help to govern how teachers treat students. One tends to see what one is looking for, hence the "bottle looks half full or half empty." The same holds true for supervisors working with teachers. The writer has worked in a supervisory/staff development program where a very positive emphasis was maintained and where teaching strengths were identified and encouraged. It is possible to approach evaluation from this stance as well and to highlight both strengths and weaknesses and to indicate how assistance and support will be provided to redress areas of deficiency.

Be Open To Learn

Evaluation for the improvement of instruction need not be feared. A teacher can be encouraged to discover alternate methods of doing things so that more options are available when instructional decisions have to be made. As supervisors and teachers work through the process together, mutual trust and respect are key prerequisites for a productive experience. Expanding the knowledge of professional skills (management and instructional techniques) is also essential. Factual and descriptive feedback about performance is appreciated by teachers and while summative reports do need to be filed from time to time, evaluation should be seen as an ongoing process for the growth and development of both teaching skills and supervisory skills. The students can only benefit from this combined effort to improve the quality of instruction.

CHAPTER SIX - APPENDIX

Extracted from "PLANNING FOR AN EVALUATION OF TEACHING PERFORMANCE"

Practice Kit

Instruction Booklet

- Description of 19 Teacher Evaluation Criteria
- Description of Five Additional Practice Videotapes

PLANNING FOR AN EVALUATION OF TEACHING PERFORMANCE

Practice Kit

Instruction Booklet

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Introduction

Purpose: To present eleven edited lessons for evaluators to **practice** identifying and/or recording observable teaching behaviors.

This practice kit consists of five videotapes of eleven edited lessons ranging from grade one through high school, along with an Instruction Booklet. These materials were developed by Alberta Education, Planning Services Branch, in conjunction with a four volume publication: Planning for an Evaluation of Teaching Performance, and the Initiation to Teaching Project. A training kit consisting of videotapes and text, to be used before the practice kit, is also available. The text, Planning for an Evaluation of Teaching Performance, Volumes I, II, III and IV, will be made available to every school jurisdiction in the province.

The nineteen criteria upon which the kit is based (Chart A) are teaching behaviors that have shown through numerous empirical studies to correlate to student achievement. A more complete explanation of the criteria selected is to be found in Planning for an Evaluation of Teaching Performance, Volume I.

Each lesson in the kit is an edited version of an actual classroom situation. Care was taken to retain the continuity of the lesson as intended by the teacher. Before **some** lessons teachers and/or students were asked to role-play certain behaviors in order to present outcomes helpful to the user of these practice videotapes.

A brief introduction precedes each lesson and specifies observable behaviors from Chart A that will be found in the teaching performance. Suggestions for use of the practice videotapes follow:

1. Teaching performance supervisors: Superintendents, principals, assistant principals and other formal evaluators, either individually or in groups, may employ this practice kit:
    - to identify specific teacher behaviors that contribute to effective teaching
    - to record teacher performance on locally developed, or otherwise obtained, instruments
    - to improve recorder reliability by practising and then comparing data collected in small groups
    - to assist in selecting or developing instrumentation
    - to determine the usefulness and type of information an instrument offers
    - to discover possible personal biases and assumptions about effective teaching behaviors

2. Teacher self-evaluation: Individual teachers may find the practice tapes useful in appraising their own teaching performance for the following purposes:
    - to identify specific effective teaching behaviors
    - to analyse personal performance in relation to the effective teaching behaviors presented in each lesson
    - to assess the impact of skills presently in use
    - to assist in detecting and solving problem teaching patterns
    - to stimulate variations in teaching behaviors
    - to assist in the peer evaluation process

Description of Teacher Evaluation Criteria

Chart A

Criteria Number	Criteria Name	Criteria Description
1.	Plans, Organization, and Implementation	Arrangements and procedures worked out in advance of instruction by the teacher and the extent to which these are appropriate and used.
2.	Academic Learning Time	The time a student is engaged with instructional materials or activities that allow a high level of success for that student.
3.	Teacher's Expectations	The appropriateness of the teacher's predictions of the individual's or group's achievements in a particular content area.
4.	Teacher's Awareness	Alertness to pupil behavior at all times; "withitness," having "eyes in the back of one's head" (Kounin, 1970).
5.	Concurrent Tasks Management	The efficiency and ease with which a teacher handles various classroom activities at the same time.
6.	Pace of Instruction	The rate at which learning experiences are provided for pupils by the teacher.
7.	Classroom Management	The teacher's facility to anticipate, prevent and deal satisfactorily with pupils' interpersonal and academic difficulties. Success in appropriately disciplining pupils.

Criteria Number	Criteria Name	Criteria Description
8.	Feedback to Pupils	Verbal and non-verbal responses to students.
9.	Time on Task	Engaged time; the time a student is attending to instruction in a particular content area.
10.	Enthusiasm	Teacher's display of eagerness and zeal.
11.	Clarity of Instruction	The communication of the teacher is such that the students are totally informed about what they should be doing, where to do it, and for how long, in order to ensure that students do not lose time because they are confused or because they are waiting for decisions to be made.
12.	Task Oriented/ Businesslike Orientation	The degree of academic focus and the teacher's directness in providing academically focussed instruction.
13.	Variability of Instruction	The appropriate use of variety in providing learning experiences for pupils.
14.	Flexibility	The ease with which the teacher adapts and adjusts satisfactorily to varying factors in the classroom setting.
15.	Understanding of Instructional Goals	The pupils' comprehension about what they should be doing, where to do it, and for how long.

Criteria Number	Criteria Name	Criteria Description
16.	Teacher Centred/Direct Instruction	"An instructional strategy where time spent on instruction is sufficient and continuous, content covered is extensive, goals are clear to students, materials are structured and sequential, questions are low level to produce many correct student responses, student progress is monitored, feedback is immediate and correct responses are reinforced. With direct instruction, the teacher sets the goals, plans the activities, chooses the material; questions are convergent, not divergent; interaction is structured, not authoritarian; tasks are cognitive oriented, not humanistic" (Ornstein, 1984: 343).
17.	Praise and Encouragement/Criticism	The appropriate use of positive (e.g., praise and encouragement) and negative (e.g., criticism) reinforcement methods.
18.	Individualization of Instruction	Teaching adapted to the background, ability, and needs of individual learners.
19.	Questioning Techniques	Matching the types of questions asked of the student to the characteristics of the student and to the instructional objectives.

Chart B

Videotape Numbers and Contents

Videotape Number	Lesson	Grade Level	Subject	Counter Footage	Counter Time
1	A	Junior High School	Social Studies	000	000
	B	High School	Statistics		18:34
2	A	High School	French	000	000
	B	Grade 2/3	Language Arts		31:20
3	A	High School	Mathematics	000	000
	B	Junior High School	Calligraphy		14:30
	C	Junior High School	Mathematics		29:38
4	A	Junior High School	Art	000	000
	B	Grade 1	Mathematics		17:55
5	A	Grade 1	Math/L. Arts	000	000
	B	Grade 1	Language Arts		27:30

This set of five additional practice tapes was edited by Linda Elliott.

Description of Five Additional Practice Videotapes

Tape 1: **35:52 minutes** **Accession Number:**__________

Lesson 1A: Junior High School - Social Studies (Grade 9)
(18:34 minutes)

3/4 000
VHS __________
Yours __________

Clarity of Instruction
Plans, Organization and Implementation
Classroom Management
Pace of Instruction
Enthusiasm

A student role plays during part of this lesson on Russian history to show some helpful classroom management strategies used by the teacher, such as, low key verbal techniques and direct discipline. Ron approaches the student on several occasions asking him to behave appropriately. When the disruptive behavior occurs for the fourth time, Ron asks Mike to leave the room to return only when he is ready to behave as accepted by the teacher. Ron uses a variety of teaching aids such as the trough, sponges and the ship which indicate lesson planning and organization of materials were present. The lesson objectives, review and new material are clearly delivered by the teacher to facilitate student understanding of goals and objectives. After lecturing on Peter the Great, Ron asks pupils to make their own notes which acts as a check for the teacher regarding his intructional pace and also assists in making students accountable for the material presented.

Accession Number: __________

Lesson 1B: High School - Statistics (Grade 12)
(17:18 minutes)

3/4 __________
VHS __________
Yours __________

Clarity of Instruction
Academic Learning Time
Pace of Instruction
Praise and Encouragement/Criticism
Task Oriented/Businesslike Orientation

This lesson on the use of Z-scores is delivered in a businesslike, direct manner. Marilyn offers praise and encouragement to individual students as she monitors seatwork. Clear delivery of lesson content through the use of examples and board work, as well as assigning related questions maximize academic learning time.

Tape 2: **47:10 minutes**

Accession Number: ________

Lesson 2A: High School French (Grade 10)
(31:20 minutes)

3/4" 000
VHS ________
Yours ________

Questioning Techniques
Classroom Management
Enthusiasm
Academic Learning Time
Teacher's Awareness
Feedback to Pupils

This high school French lesson on the verb tense "passé composé" offers numerous effective teaching behaviors. Denise employs low key classroom management strategies as she calls upon students to respond to her questions. Her continuous and enthusiastic verbal feedback to pupils assists in maintaining their attention and thus teacher control. Denise's movement around the U-shaped seating arrangement facilitates her awareness of student behavior.

Accession Number: ________

Lesson 2B: Grades 2/3 -Language Arts
(15:50 minutes)

3/4" ________
VHS ________
Yours ________

Clarity of Instruction
Concurrent Tasks Management
Individualization of Instruction
Classroom Management
Enthusiasm

This teacher begins by clearly introducing the upcoming events of the morning, and then specifies the objectives of this particular lesson. Heather employs a variety of low key classroom management strategies such as eye contact, hand gestures, touching, and calling out names of inattentive students to focus pupils' attention back on task. She displays concurrent tasks management as she corrects students' spelling and monitors classroom behavior in this split grade 2/3 class.

Tape 3: **51:30 minutes** **Accession Number:** ________

Lesson 3A: High School - Mathematics (Grade 12)
(14:30 minutes)

3/4" 000
VHS ________
Yours ________

Clarity of Instruction
Teacher's Expectations
Academic Learning Time
Teacher Centered/Direct Instruction
Praise and Encouragement/Criticism

Numerous effective teaching strategies are employed by this high school mathematics teacher. Ted uses direct instruction to clearly outline the unit objectives and lesson objectives and to review past work. He reviews and teaches new material by calling upon students to respond to questions from the board. Lecture, questioning and seatwork provide academic learning time for student understanding of course material. The teacher praises and encourages students as he moves around the classroom and at one point criticizes a student's work and compares those efforts to another student's - reinforcing the high expectations he has for student work.

Accession Number: ________

Lesson 3B: Junior High - Calligraphy (Grade 7)
(15:08 minutes)

3/4" ________
VHS ________
Yours ________

Teacher Expectations
Classroom Management
Individualization of Instruction
Feedback to Pupils
Questioning Techniques

A brief reading period precedes the calligraphy class on this videotape. The low key classroom management strategy of teaching rules, routines and procedures appears to be in effect as this lesson progresses. Pupils know that they will be asked to recall announcements; they know the day begins with a reading period during which some students will be asked to give a summary of their book. The teacher's expectations are relayed to the students in the calligraphy class during the introduction of lesson objectives and again while he assists individual students as they complete their letters. Merv employs questioning techniques with pauses to handle the review.

Accession Number: ________

Lesson 3C: Junior High - Mathematics (Grade 7)
(21:52 minutes)

3/4" ________
VHS ________
Yours ________

Classroom Management
Task Oriented/Businesslike Orientation
Pace of Instruction
Questioning Techniques
Praise and Encouragement/Criticism
Time-on-Task

The teacher greets students at the door which is a classroom management strategy that can defuse problem behavior and make students feel welcome. Merv uses a quiz at the beginning of this lesson to review past material. Correcting homework also acts as a review. Examples of assisting students to correctly answer homework questions are displayed. Students are allowed time to complete tasks assigned.

Tape 4: 30:25 minutes **Accession Number:** ____________

Lesson 4A: Junior High - Art (Grade 7)
(17:55 minutes)

3/4" 000
VHS ____________
Yours ____________

Plans, Organization and Implementation
Praise and Encouragement/Criticism
Individualization of Instruction
Variability of Instruction
Enthusiasm

This teacher has planned and organized this lesson as evident in his introduction of new material and lesson objectives. Ron uses praise, encouragement and criticism on an individual basis to direct student behaviors and outcomes.

Accession Number: ____________

Lesson 4B: Grade 1 - Mathematics
(12:30 minutes)

3/4" ____________
VHS ____________
Yours ____________

Questioning Techniques
Plans, Organization and Implementation
Praise and Encouragement/Criticism
Enthusiasm
Variability of Instruction

This instructor reviews past material using questioning techniques and offers praise and encouragement to respondents. Faye varies instruction throughout this math lesson by progressing from questions, to boardwork, to reinforcing games and finally to worksheets. As students complete seatwork, she monitors their understanding of material on an individual basis. The math games played during part of the lesson are an indication of teacher pre-class organization and in-class implementation of plans.

Tape 5: **44:20 minutes** **Accession Number:** ________

Lesson 5A: Grade 1 - Mathematics, Language Arts
(27:30 minutes)

3/4" 000
VHS ________
Yours ________

Individualization of Instruction
Praise and Encouragement/Criticism
Classroom Management
Concurrent Tasks Management
Teacher's Awareness

This teacher uses a game to review the numbers from 0 to 100 in her grade one math class. Students are then given time to practice using worksheets while the teacher gives individual assistance as she monitors seatwork. Helen uses riddles to encourage a smooth and quick transition from math to language arts. Low key, non-verbal classroom management strategies occur as Helen uses eye contact, gestures, facial expressions and moves closer to disruptive students in order to return them to on task behavior. Direct discipline is also evident as a classroom management technique. The teacher's awareness of distracting behavior allows her to stop major disruptions before they occur. The fact that Helen monitors student behavior, continues with the lesson, and completes board work shows concurrent tasks management.

Accession Number: ________

Lesson 5B: Grade 1 - Language Arts
(16:50 minutes)

3/4" ________
VHS ________
Yours ________

Classroom Management
Concurrent Tasks Management
Individualization of Instruction
Academic Learning Time
Time-on-Task

Concurrent tasks management could be the focus of this teacher's performance. Faye seems to be doing five activities at once as some students request assistance about the topic and others require monitoring. Low key classroom management techniques are employed by this teacher to ensure students are on task. Faye offers individual assistance to students as they write their stories about a time when someone said "no" to them.

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